# City of Chicago Department of Public Health

# Official Response to Public Comments on Proposed Rules for Reprocessable Construction/Demolition Material Facilities

# November 21, 2022

# I. Purpose

The purpose of this document is to respond to the issues and questions raised by commenters on the Proposed Rules for Reprocessable Construction/Demolition Material Facilities (Proposed Rules), issued by the Chicago Department of Public Health (CDPH) on September 17, 2021. This document also explains how the Proposed Rules were modified in response to these comments. In summary, the Revised Proposed Rules include several new opportunities for public participation, added provisions to consider compliance history in the issuance and renewal of permits, as well as strengthened requirements around proof of pavement durability and conditions for after-hours operations. In addition, CDPH has clarified some terminology in response to industry comments and has replaced the requirement for air-dispersion modeling with new requirements for a detailed emissions inventory, third-party evaluation of dust controls, and the near-real-time transmission of monitoring and weather station data to CDPH.

The Revised Proposed Rules for Reprocessable Construction/Demolition Material Facilities (Revised Proposed Rules) are attached to this document and can also be found at <a href="https://www.chicago.gov/environmentalrules">www.chicago.gov/environmentalrules</a>. CDPH is providing a public comment period on the Revised Proposed Rules. Interested parties may submit a comment through CDPH's new Public Comment Form through January 20, 2023. Visit <a href="https://www.chicago.gov/cdphcommunityinfo">www.chicago.gov/cdphcommunityinfo</a> for more information.

The Proposed Rules and the Revised Proposed Rules are jointly referred hereafter as "the Rules."

# II. Background

On September 17, 2021, CDPH published a notice and solicitation of written comments with respect to its Proposed Rules pursuant to Chapters 2-112 and 11-4 of the Municipal Code of Chicago (MCC or Code). As stated in the accompanying cover letter, the purpose of the Proposed Rules was to update and expand upon the existing regulatory requirements for Reprocessable Construction/Demolition Material Facilities, commonly known as "rock-crushing facilities." The Rules were modeled after the CDPH's Rules for Large Recycling Facilities<sup>1</sup> ("Large Recycling Rules").

As with the Large Recycling Rules, the Rules for rock-crushing facilities included new requirements for all future permit applications, including detailed design plans, operating plans, and operating standards. Further, all rock-crushing facilities would be required to conduct studies to determine their potential contributions to noise, air pollution, and traffic impacts and to implement stronger controls to minimize

<sup>&</sup>lt;sup>1</sup> https://www.chicago.gov/content/dam/city/depts/dol/rulesandregs/CDPH%20Rules-for-LargeRecycling-Facility Effective.6 5 20.pdf

any adverse impacts. New and Expanding Facilities would be required to provide more details and background information than Existing Facilities.

On September 27 and 28, 2021, CDPH conducted two stakeholder briefing presentations to explain and answer questions about the Proposed Rules. A recording of the first presentation was sent to individuals who signed up to attend the meeting and was also posted on the City's website.

The public comment period on the Proposed Rules was originally scheduled to close on October 18, 2021, but, upon request, was extended to November 1, 2021. CDPH received nine submissions of written comments, many of which were extensive and detailed, including letters from affected businesses and industry representatives<sup>2</sup>, as well as letters from health and environmental advocacy non-governmental organizations (NGOs)<sup>3</sup>.

In addition, CDPH received a letter of support from the U.S. Environmental Protection Agency (EPA), observing that: "Once again, the City of Chicago is demonstrating its deep commitment to addressing sources of pollution that disproportionately affect communities with environmental justice concerns, a commitment which EPA shares."

Copies of all written comments are available on CDPH's website at www.chicago.gov/EnvironmentalRules.

# III. Summary of Comments Followed by the City's Response

This document summarizes the substantive comments received by the City and includes CDPH's response to each summarized comment. In cases where multiple comments addressed the same issue, this document summarizes and responds to a comment that is representative of that issue. Some of the comments included specific suggestions for revisions to the Proposed Rules, while others were more general. This document provides responses to both types of comments.

The comments and responses below are presented in seven categories: 1) Scope of the Rules; 2) Definitions; 3) Short Form Permit Application; 4) Enforcement; 5) Public Participation 6) Application Requirements; and 7) Operating Standards. Section numbers refer to the numbering as they appeared in the Proposed Rules unless otherwise noted.

<sup>&</sup>lt;sup>2</sup> Industry comments were submitted by Ozinga, Reliable Asphalt Corporation, and the Illinois Association of Aggregate Producers.

<sup>&</sup>lt;sup>3</sup> NGO comments were submitted by the Natural Resources Defense Council (NRDC), the Environmental Law and Policy Center (ELPC), the Illinois Environmental Council (IEC), the Chicago Audubon Society, the Respiratory Health Association, the Southeast Side Environmental Task Force (SETF), the Chicago Environmental Justice Network, and Openlands.

# 1. SCOPE OF THE RULES

## A. APPLICABILITY OF RULES

# a. Need for rules

The industry commenters stated generally that the Proposed Rules are excessive and unjustified, considering, as Reliable stated, that "rock crushing and recycling of construction and demolition materials are not major contributors to particulate matter in the air," and that "Based on the National Ambient Air Quality Standards (NAAQS), Chicago is in attainment status for particulate matter." The Illinois Association of Aggregate Producers (IAAP) cautioned that the Proposed Rules would discourage recycling. They further stated that the rules are contrary to the 2021 City of Chicago Waste Strategy, the Chicago Climate Action Plan, and the Chicago Sustainable Development Policy. If some facilities wind up shutting down because of the increased costs required by the rules, then "2.5 million tons or roughly 125,000 additional truck trips would need to be taken out of Chicago and disposed of or landfilled. That would generate significant additional amounts of traffic, carbon, NO2, and particulate emissions associated with the transport out of the City."

#### **CITY RESPONSE:**

CDPH respectfully disagrees with Reliable and other commenters from the industry that the Proposed Rules were excessive and unjustified for the following reasons:

A. High Potential for Dust – Although not considered a major source for EPA and IEPA air permitting purposes, rock-crushing facilities have the potential to exceed NAAQS at the hyper-local level. For example, air dispersion modeling conducted by a rock-crushing facility in Chicago reported peak hourly and daily total suspended particulates ("TSP") levels of 983.2 ug/m3 and 579.9 ug/m3, respectively. Assuming 44% of the TSP was PM10, the PM10 fraction would be about 255 ug/m3 or roughly 170% of the NAAQS standard. Likewise, assuming 49% of the PM10 above was PM2.5, the peak emission would have contained over 250% of the NAAQS PM2.5 24-hour standard of 35ug/m3.<sup>4</sup>

Therefore, just because a facility is a not major source per state and federal permitting requirements does not rule out the potential presence of localized hotspots that exceed NAAQS and may have consequential health and quality-of-life impacts on adjacent populations. Many of these localized hot spots likely go undetected given the sparse availability of federal ambient air monitors, and despite the presence of more numerous lower-grade air monitors such as Purple Air and

<sup>&</sup>lt;sup>4</sup> CDPH notes that the modeled concentrations of TSP are likely conservative and the actual fractions of PM10 and PM2.5 in TSP at rock crushing facilities may differ from the CDPH's assumptions that were taken from a study by the Journal of the Air & Waste Management Association.

https://www.tandfonline.com/doi/pdf/10.1080/10473289.1997.10464407

Microsoft's Eclipse network<sup>5</sup>. Unfortunately, these hot spots are often not discovered until they result in complaints, and even then, are difficult to observe first-hand after the fact.

Relatedly, just because Chicago is currently in attainment of NAAQS for particulates should not mean PM emissions ought to be allowed to rise until it reaches unacceptable levels, particularly when such standards are subject to change and tend to get more stringent over time. Most recently, on June 10, 2021, EPA announced it will reconsider its December 2020 final decision to retain the annual PM2.5 NAAQS of 12 ug/m3, over the proposed 8 to10 ug/m3 standard recommended by EPA's own Integrated Science Assessment in 2019.<sup>6</sup>

As mentioned by the commenters, Chicago is in non-attainment for ozone. Recently, EPA reclassified the Chicago IL/IN/WI ozone non-attainment area from marginal to moderate status. With this downgrade in non-attainment status comes additional regulatory requirements.

Ozone is not directly emitted but forms from a complex photochemical reaction process involving nitrogen dioxide (NO2) and volatile organic compounds (VOCs) in the air. A major source of NO2 is diesel engine emissions from on-road and non-road sources such as trucks, material-handling equipment, and generators, like those operated at rock-crushing facilities in large numbers. Given the Chicagoland's worsening non-attainment status for ozone, it is more critical that we reduce emissions that contribute to the formation of ozone.

- B. **Dust Nuisance Complaints** In addition to modeling showing potentially high concentrations of dust, in practical terms, rock-crushing facilities are frequent subjects of dust-related complaints and violations.
- C. **Toxic Substances in Dust** As stated by other commenters, dust emitted from rock-crushing facilities may contain a significant fraction of harmful substances such as crystalline silica, lead, and asbestos.

Crystalline silica is a natural mineral present in sand, stone, concrete, and some types of mortars. The National Institute for Occupational Safety and Health (NIOSH) deems crystalline silica a potential occupational carcinogen and overexposure to this mineral dust can result in serious respiratory diseases such as silicosis, an incurable and often fatal lung condition. As such, OSHA sets enforceable respirable crystalline silica standards for construction, general industry, and maritime industries.

Lead and asbestos contamination may be introduced through concrete debris or other feedstock processed at the rock-crushing facility. Primary sources of lead at rock-crushing facilities come from materials coated with lead-based paint ("LBP").

<sup>&</sup>lt;sup>5</sup> https://www.all4inc.com/4-the-record-articles/u-s-epa-to-reconsider-pm2-5-naaqs//

<sup>&</sup>lt;sup>6</sup> https://www.epa.gov/pm-pollution/national-ambient-air-quality-standards-naags-pm

Meanwhile, asbestos was historically added to concrete to reduce cracking, increase durability, and improve fire resistance. Asbestos was also used in other building products that may find their way into the rock crushing facility feedstock, such as mastic, tiles, and mortar.

Despite LBP usage in the US generally ending around 1978 and asbestos use around 1989, and the fact that local, state, and federal laws require the demolition of most old structures to be surveyed and abated for these materials, due to their ubiquitous use and high prevalence, lead and asbestos remain a concern, and should be continuously screened for and monitored at rock-crushing facilities and operations.

D. **Current Burdens on Applicants** – Absent specific rules for rock crushing facilities, it has been a long-standing policy started by the Chicago Department of Environment, and continued by CDPH, to require rock-crushing facility applicants to comply with the waste transfer station permitting requirements found in the Landfills, Liquid Waste Handling Facilities and Transfer Station Rules<sup>7</sup> ("Waste Rules").

As such, aside from the new air monitoring, quarterly reporting, and updates to old requirements, rock-crushing facility permit applicants were already subject to many of the requirements contained in the Waste Rules, including the traffic study, demonstration of zoning compliance, surveys and drawing requirements, demonstration of utilities, water sources, water drainage, parking, employee facilities, storage and operating capacity calculations, waste screening, fire prevention and accident safety plan, first aid equipment, site security, fencing, location standards, vector-control, facility operating record, record keeping, dust control, paving, closure cost estimate, and other requirements.

E. Consistency with Similar Rules and with the Air Quality Ordinance – Rock-crushing facilities, large recycling facilities, and bulk solid material facilities are similar operations, the biggest difference being the feedstock and products they handle. All do material storage, handling, and processing of some sort such as the screening, crushing, blending, or sorting of materials. Also, these facilities generate significant truck traffic and may utilize other forms of transport such as rail and barge.

Therefore, the negative impacts they cause to neighboring properties would also be alike, including the level of dust and other emissions, noise, traffic, and visual blight.

Given the above similarities, it makes sense that the rules and standards for these three types of facilities would be comparable, which they now are, under the Rules. Specifically, the new rules match most of the requirements already in effect under the Large Recycling Rules, and to a lesser extent the Control of Emissions from

<sup>7</sup> 

https://www.chicago.gov/content/dam/city/depts/dol/rulesandregs/LandfillsLiquidWsteHandlingFacilitiesTransfer Stns.pdf

Handling and Storing Bulk Materials rules<sup>8</sup> ("Bulk Material Rules"). The variations among them pertain to differences in their operations and the kinds of materials handled, and the incorporation of improvements and lessons learned from the two earlier regulations.

The Revised Proposed Rules also bring consistency between the City's Air Quality Ordinance<sup>9</sup> under Title 17 of the MCC. Specifically, new and expanding rock-crushing facilities must also meet the same air quality impact evaluation<sup>10</sup> that new or expanding class III recyclers, class IVA recyclers, class IVB recyclers, class V recyclers, and bulk material storage facilities must already do.

In response to the IAAP comments, CDPH fully supports the recycling and reuse of Reprocessable Construction/Demolition Materials ("reprocessable materials"). CDPH does not believe the new requirements will drive recycling out of the city. For instance, similar requirements under the Large Recycling Rules have not resulted in such businesses from shutting down and moving out of Chicago.

#### b. Other industrial activities

Some of the NGOs stated that the Proposed Rules are not sufficient to encompass the full range of industrial activities similar to rock crushing, some of which pose almost identical environmental harms. The Southeast Environmental Task Force (SETF) noted the examples of front-end/original construction, aggregate and concrete manufacture, and slag grinding. In particular, the Natural Resources Defense Council (NRDC) stated that, at the very least, CDPH "must ensure immediate and stringent regulation of slag grinding operations." NRDC pointed, specifically, to a proposed slag-grinding operation "potentially imminently facing the Southeast Side community," and stated that if CDPH determines not to apply the Proposed Rules to construction and demolition materials more broadly, it could still address slag grinding here by revising the Proposed Rules to cover reprocessing of materials from other industrial processes, along with construction and demolition materials.

In addition, the Illinois Environmental Council (IEC) and others commented that these rules should encompass facilities that use aggregate to create asphalt, "which can be extremely damaging to the environment and public health."

# **CITY RESPONSE:**

The Proposed Rules and Revised Proposed Rules implement the Reprocessable Construction/Demolition Material Ordinance, which applies to Reprocessable Construction or

https://www.chicago.gov/content/dam/city/depts/dol/rulesandregs/Storage%20Control%20of%20Emissions%20from%20Handling%20and%20Storing%20Bulk%20Materials%20January%202019.pdf

https://chicago.legistar.com/View.ashx?M=F&ID=9265257&GUID=8D4F369C-5D23-44E1-BEB6-25C1E23E81F7

<sup>&</sup>lt;sup>10</sup> https://www.chicago.gov/content/dam/city/sites/air-quality-zoning/pdfs/Air-Quality-Impact-Evaluation-Interim-Guidance.pdf

Demolition Material Facilities. Pursuant to MCC Section 11-4-1910: "Reprocessable construction/demolition material facility' or 'facility' shall mean a site used for purposes of receiving, storing, reprocessing and transport of reprocessable construction/demolition material. Section 11-4-1910 further provides that "Reprocessable construction/demolition material" shall mean broken concrete, bricks, rock, stone or paving asphalt generated from construction or demolition activities."

In addition, Section 11-4-1950 states that: "A facility shall be operated for the primary purpose of reprocessing reprocessable material. This ordinance shall not be construed, interpreted or implied to permit the use of land as a landfill or other similar use."

CDPH also notes that the Chicago Zoning Code does not require special use approval for rock crushing activities that are an accessory to a property's primary use. Consequently, facilities that do not meet the ordinance definitions, and do not operate for the primary purpose of reprocessing reprocessable material, are not required to obtain a rock crushing facility permit and are not subject to these rules. CDPH cannot amend the Code through a rulemaking.

Notably, however, facilities that conduct slag grinding, produce asphalt or cement, or conduct similar operations, must obtain air pollution control permits from CDPH and comply with all the requirements under Article II – Air Pollution Control, Chapter 11-4 of the Code.

# c. Implementation Schedule (Rule 6.0)

Reliable commented that CDPH should strike the provision that states, for an Existing Facility, the requirements in Section 3.0 shall take effect one year following the Effective Date of these rules."

# **CITY RESPONSE:**

Given the narrowed scope for Existing Facility applications (e.g., no requirements for an air dispersion modeling study and traffic study), CDPH believes one year is ample time to prepare the necessary documentation. However, the applicant may request additional time for good cause as stipulated under Section 9.0 of the Revised Proposed Rules.

# 2. DEFINITIONS (Rule 2.0)

# A. Facility

The NGOs stated that the definition of "Facility" should be revised to protect against improper segmenting of nearby and closely related operations. As they explained, one concern with the definition of "Facility" in the Proposed Rules is that it discusses the "Site," "which in turn is separately and circularly defined as 'all areas of Property that are available for use or are used in the operations of the Facility.' They commented that CDPH should revise these definitions to ensure that plot/site boundaries are not the defining element of a "Facility," and conversely to ensure that all adjacent or nearby operations that meet various ownership/control and interrelatedness criteria are assessed and permitted together as a single "Facility" under these rules.

#### **CITY RESPONSE:**

In response to the NGO's comments, CDPH eliminated the term "Site" and revised the definitions in the Revised Proposed Rules as follows:

"Facility" See Reprocessable Construction/Demolition Material Facility.

"Reprocessable Construction/Demolition Material Facility" means a site used for purposes of receiving, storing, reprocessing and transport of reprocessable construction/demolition material.

"Operator-utilized Area" means all areas of the Property that are available for use or are used by the Owner or Operator, including areas not covered under a Reprocessable Construction/Demolition Material Facility permit.

"Property" means the land described by a legal description that contains a Facility or proposed Facility and may include Operator-utilized Area(s), and other area(s) not used by the Owner or Operator.

The type of permit CDPH issues generally corresponds with the zoning-approved use(s) of the property. A rock-crushing facility may require other CDPH permits. For example, a new rock-crushing facility wishing to also handle uncontaminated soil will require zoning approval for both a reprocessable C/D material facility and a class v recycling facility uses. Correspondingly, CDPH would require both permit types for this site.

However, if the primary use of a property is manufacturing and any reprocessing or recycling activity is considered an accessory use by Zoning, then CDPH would only require an air permit, covering all emissions sources at the facility. CDPH will generally treat all emission sources under common ownership or control as a single source.

# B. Modify / Modification

Under the Proposed Rules, some requirements apply to all facilities, including those Existing Facilities that are currently permitted, while other requirements apply only to new, Modifying, and Expanding facilities.

In that regard, Reliable and the Illinois Association of Aggregate Producers (IAAP) stated that the definitions of "Modify" and "Modification" should be revised so as not to include "changes in configuration or capital improvements." Reliable asserted that requiring a facility to obtain a permit modification in such cases will discourage facility improvements. IAAP noted that facilities may change site layouts or configurations seasonally and this will not result in increased dust or particulate matter.

# **CITY RESPONSE:**

CDPH notes that there is no additional permit fee to submit a Modification application. In addition, other than the documentation of the proposed changes, most of the requirements for a Modification should already have been done or will have to be done anyway to complete an application for an Existing Facility.

Even if the Applicant believes changes to be minor, changes in configuration may have a consequential impact on the potential of dust to escape the property or have other unintended consequences that result in a public nuisance. As such, substantial changes in reconfiguration that runs contrary to any assumption, finding, calculation, statement, or conclusion made in the design report or operating plan, including those contained in the air dispersion or noise impact modeling study, require an application and prior approval from CDPH. To afford greater flexibility and avoid frequent application submissions to CDPH for routine changes, CDPH recommends the applicant consider the range of possible site configurations and operational variabilities within the main application for a permit or permit renewal.

As to capital improvements, as stated in CDPH's Official Response to Public Comments on Proposed Rules for Large Recycling Facilities dated June 5, 2020<sup>11</sup>, CDPH needs to know about all physical improvements to a Facility to ensure that such implementation will go through proper engineering review and sign-off, will perform as expected, and minimize negative (intended and unintended) consequences.

# C. Tipping Floor

Reliable suggested that the term "Tipping Floor" should be changed to "Tipping Area," since these facilities do not typically use tipping floors.

#### **CITY RESPONSE:**

CDPH agrees with the comment and has changed the term "Tipping Floor" to "Tipping Area" in the Revised Proposed Rules

# 3. SHORT FORM PERMIT APPLICATION

The Proposed Rules allow Qualified Existing Facilities to submit a short-form application for each of two years following submission of a full application. Reliable objected to the requirement that such facilities be required to submit a full application every three years, stating that "Re-review of Existing and Modifying Facilities every three years creates an uncertainty in permitting that does not allow for the economic investments required to perform this critical function.... The Short Form permit provides the necessary information to the CDPH while maintaining the protected operational and land use rights of the Operator."

Relatedly, Reliable and IAAP noted that "Section 4.0 (last paragraph after 4.5) requires an existing facility, regardless of whether the facility is undergoing an expansion or modification, to conduct modeling every three (3) years." They further stated that "no federal or state regulatory program requires such frequent, costly, and unnecessary air dispersion modeling without a triggering event. There is no purpose for conducting source specific modeling if there are no changes to operations conducted at the source itself. This section of the proposed rule should be stricken or revised to

<sup>1.</sup> 

https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/CDPH%20Response%20to%20 Comments%20on%20Proposed%20Rules%20for%20Large%20Recycling%20Facilities%20-%20June%205,%202020.pdf#page=10

exempt an existing facility from these requirements unless a triggering event (i.e., modification, expansion, increase in capacity) occurs."

#### **CITY RESPONSE:**

The Revised Proposed Rules eliminated the air-dispersion modeling requirements. Instead, 4.8.10 of the Revised Proposed Rules now requires an evaluation, by a qualified third-party, on the effectiveness of the facility's dust control plan. In addition, under 7.18 of the Revised Proposed Rules, Facilities must also provide a detailed emissions inventory using forms supplied by CDPH. CDPH may use this data to perform air dispersion, risk assessment, or other evaluations, including for the potential siting of additional PM10 monitors pursuant to Subsection 5.5 of the Revised Proposed Rules.

# 4. ENFORCEMENT

IEC and others stated that CDPH should clarify how emitting sources will be held to the assumptions in their modeling demonstrations and explain what the penalties will be for violating the rules.

#### CITY RESPONSE:

CDPH will reference or explicitly reiterate all relevant assumptions and information in the permit. Any changes to the facility operations, including operational and site configuration changes, require an application to modify the permit. See CDPH's response to the Modify / Modification comment above.

Violations of the Rules or permit conditions may be enforced under 11-4-030 of the MCC. In addition, such violations may be used by CDPH in considering future permit applications and renewals, and for potential permit suspension or revocation, pursuant to Section 8.1 of the Revised Proposed Rules.

## 5. PUBLIC PARTICIPATION

#### A. Public Comment Period

NRDC, IEC, and others urged CDPH to strengthen public participation in the rock crusher rules. In particular, they recommended that CDPH "provide a public comment period to aid in determining the sufficiency of the application (as with the Large Recycling Facility Rules), with a subsequent determination that the application is complete triggering the Code's 90-day decision timeframe."

# **CITY RESPONSE:**

CDPH has updated its public participation guidelines for consequential recycling facilities to include New and Expanding waste and rock-crushing facilities.

In terms of the 90-day response period under 11-4-1930 of the MCC, the MCC states that "The commissioner shall have 90 days to act upon the application." As 'act' is a broad term, CDPH

believes it has sufficient flexibility in accommodating a thorough review of the application, while allowing for meaningful public participation.

# B. Aldermanic and Public Notification (Rule 3.11)

The Proposed Rules reference the ordinance requirement to provide notice to the alderman within whose ward a new facility is proposed to be located, and further requires compliance with the community meeting provision in Section 17-9-0117-G.4 of the Air Quality and Zoning Ordinance. ELPC commented that this Rule should go further and "explicitly allow community members' access to the permit application, including, but not limited, to the operating plan, design plan, environmental assessment, contingency plan, dust monitoring plan, and the closure plan via a publicly accessible website and in a physical location for review by members of the public."

Relatedly, CEJN requested that a new requirement be added for New and Expanding Facilities to provide aldermanic notice regarding traffic flow. They proposed a new section 3.8.13.1.5, which would require:

"A certified copy of letter of notification regarding vehicle use sent from the owner or operator of the facility to the alderman for the ward in which the facility is located and to all residents within a quarter mile radius of the facility's ingress and egress. Notice shall include: a. A summary the average and maximum number of vehicles generated by the facility; b. A description of peak facility traffic hours; c. A summary of the idling reduction plan to be enforced at the facility referenced in 3.8.13.1.3; and d. Instructions for filing a complaint with CDPH regarding idling vehicles and/or excessive traffic caused by the Facility, including the name and contact information for the Facility operator."

(See also CEJN's comments regarding public notification about noise waiver requests in NOISE IMPACT ASSESSMENT (Rule 3.8.19) below and about alternate RAL exceedance notifications in d. Alternate RAL (Rule 5.8.7.1.8) below.)

# **CITY RESPONSE:**

CDPH will post the full application on its website as part of CDPH's update to its public participation policy for consequential facilities. See CDPH's response to the Public Comment Period comment above. In addition, CDPH will investigate ways it can make available electronically the remaining information requested by CEJN. In its effort to save paper and preserve valuable storage space, CDPH requires applications to be submitted electronically. Given the logistics and resources involved, at this time, CDPH is not committing to making physical copies of documents available in public repositories.

## C. Monitoring data

With respect the air monitoring requirements in the Proposed Rules, ELPC commented that the public should have timely access to all monitoring data "on at least a publicly accessible website, so community members can understand to what pollutants they are being exposed." They

further stated that: "Communities should not have to wait for CDPH to potentially post the information once received from the permittee. Waiting for air quality monitoring data months, or even weeks, after people have been exposed to pollutants neither promotes transparency nor protects public health."

#### **CITY RESPONSE:**

CDPH agrees that monitoring data should be timely and made publicly available. Toward this end, 7.17 of the Revised Proposed Rules requires monitoring data to be initially submitted monthly and then eventually in near-real-time (i.e., at least every fifteen minutes) by the 18th month following the effective date of these rules. CDPH commits to posting and updating the regulated facilities' monitoring data on the open data portal as soon as staffing and resources permit.

# 6. APPLICATION REQUIREMENTS (Rule 3.0)

Section 3.0 of the Proposed Rules contains the application requirements for all Facilities, other than a Qualified Existing Facility. In the Revised Proposed Rules, Section 3.0 and Section 4.0 contain the Design Report requirements for New and Expanding Facilities, and Existing and Modifying Facilities, respectively. Section 5.0 contains the Operating Plan requirements for all Facilities.

# A. Compliance History

SETF stated that CDPH should add a requirement that the application review include a consideration of a company's or facility's history of compliance with all applicable environmental regulations – including Federal, State and City regulations – in determining whether a permit should be granted. They cited section 11-4-670(a) of the Code (regarding standards for the issuance of annual certificate of operation) to argue that the MCC provides authority to take compliance history into account.

## **CITY RESPONSE:**

CDPH agrees and has added a section on compliance history, suspension, and revocation considerations, as well as a formal process for appeals. See Section 8.0 of the Revised Proposed Rules. Section 8.0 is consistent with the compliance history review for recycling facilities.

# B. Short Application Form

Reliable suggested that the introduction to Section 3.0 be clarified by adding "for the first three years," a Qualified Existing Facility may submit a Short Application Form. They further stated that the Short Application Form should be sufficient for CDPH review of existing and modifying facilities.

#### **CITY RESPONSE:**

The information contained in the full application is important to ensure the facility is operating in a manner protective of public health and the environment. In addition, Existing Facilities have a full year to prepare the information required under Section 4.0 and Section 5.0 of the Revised Proposed

Rules (Section 3.0 under the Proposed Rules). CDPH believes this is sufficient time given the more limited scope (e.g., no dispersion modeling) required for existing Facilities.

As briefly mentioned above, for clarity, the Revised Proposed Rules separated the Design Report requirements for new and expanding Facilities (see Section 3.0) from those required for existing and modifying Facilities (See Section 4.0). CDPH also dedicated a full section on the Operating Plan (see Section 5.0) requirements for all Facilities. Further, Section 6.0 describes the requirements for Qualified Existing Facilities. Per Section 6.0, "At least once every (3) three years, each Existing Facility must submit an application which provides all of the information required under Section 4.0 and Section 5.0 of these rules. CDPH may, at the Commissioner's discretion, require an application which provides all of the information at any time." Finally, a Qualified Existing Facility is defined in the Revised Proposed Rules as "an Existing Facility that has submitted a full permit application pursuant to either Section 3.0 and Section 5.0, or Section 4.0 and Section 5.0, of these rules within the previous (3) three years, that is not proposing an Expansion, Modification, or any changes from its current permit, and that is operating in full compliance with the most recent, approved permit."

# C. Property Owner Authorization (Rule 3.5)

IAAP commented that CDPH should strike this requirement or allow the operator to provide an affidavit attesting to having the authority to operate at the site. They stated that, otherwise, this requirement makes it difficult when the owner is not the applicant, and an operating agreement requires the operator to obtain all permits and approvals in order for the facility to operate.

#### CITY RESPONSE:

Under the MCC, both Owners and Operators of sites have liability for violations of the environmental provisions of the MCC. Accordingly, CDPH needs to know who the property owners are. Under the Revised Proposed Rules, existing Facilities do not have to provide a written authorization from the Owner if the property ownership has not changed.

# D. Nature of Special Use (Rule 3.7)

Reliable commented that CDPH should replace the requirement that applications include a copy of the special use variance with "evidence of zoning approval." They stated that a site may be permitted or allowed by an alternate approval, such as a Planned Development.

#### CITY RESPONSE:

CDPH agrees with the comment and has revised the language in the Revised Proposed Rules.

"The application shall contain evidence of zoning approval such as a copy of the Special Use or Planned Development ordinance, and any documents and drawings referenced therein."

# E. Aerial Photographic Drawing(s) (Rule 3.8.3)

Rule 3.8.3 requires the Design Report for New or Expanding Facilities to include aerial photography containing certain requirements. Reliable pointed out that Rule 3.8.3.1.4 requires the required

drawings to identify additional characteristics or features with an applicable location standard and indicate the setback distance, whereas "USGS maps must be used for all property within 1 mile." (This presumably refers to requirement for a USGS map in Rule 3.8.2.)

#### **CITY RESPONSE:**

The scales differ as CDPH will use the USGS maps to evaluate the larger community area and use the higher-resolution aerial to evaluate features more immediate to the Facility.

# F. Location Standards (Rule 3.8.4)

Rule 3.8.4 requires the Design Report for New or Expanding Facilities to Demonstrate compliance with certain standards, including those listed below.

Reliable and IAAP each stated that C&D recyclers should not be subject to the same residential separation requirements as waste-related uses, because these facilities process "benign, natural materials, not hazardous materials."

#### **CITY RESPONSE:**

As discussed in CDPH's response to the industry group's comments in the Need for rules section above, rock-crushing facilities can generate PM10 and PM2.5 dust emissions above NAAQS. In addition, these materials may contain lead, asbestos, and crystalline silica at levels harmful to workers and the public. As such, the setbacks required for waste, recycling, and similar facilities are equally necessary for rock-crushing facilities.

Reliable and IAAP each commented that the Rule stating that a Facility "shall not pose a threat to any historic site" is vague and subjective and, therefore, cannot be satisfied without clarification.

#### **CITY RESPONSE:**

The language in the referenced section pertaining to historic sites is consistent with parallel provisions in long-standing rules such as the rules Landfills, Liquid Waste Handling Facilities and Transfer Stations.

# G. Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7)

CEJN commented that "[c]onsidering the extensive health and environmental impacts" associated with rock crushing, "the most appropriate approach is to require all rock crushing facilities to operate completely enclosed and equipped with a local exhaust ventilation system ('LEV')." (In particular, CEJN commented that "rock crushing dust is known to contain and carry numerous hazardous materials including silica, lead, and particulate matter (PM)," and that "PM exposure has been linked to premature death, heart attack, irregular heartbeat, aggravated asthma, decreased

lung function and increased respiratory symptoms like coughing or difficulty breathing"). Therefore, CEJN proposed that rock-crushing facilities should be subject to similar enclosure requirements as apply to facilities under CDPH'S Rules for the Control of Emissions from Handling and Storing Bulk Materials. Thus, CEJN urged CDPH to add a new section entitled "3.8.4.1.7. Enclosure," which would provide that:

"All Facility operations and stockpiles shall be fully enclosed such that all crushing, inspection of materials, loading and unloading, transporting, storage of material, and any other onsite operators are enclosed and attached to a local exhaust ventilation system to ensure proper air pollution management. A Facility may apply for a variance, as referenced in Section 7.0 of these rules, allowing for partial enclosure upon demonstration that full enclosure is not technically feasible at the Facility. Cost shall not be a consideration in making this determination."

Additionally, CEJN proposed a new section entitled 3.8.4.1.8 Partial Enclosure," which would state that:

"If CDPH determines full enclosure of a Facility is not technically feasible, best practices for partial enclosure shall be followed. At a minimum, the head and tail ends of all conveyor belts, staging areas, storage piles, loading/unloading areas, dumping points, loading chutes, discharge points, and transfer points shall be enclosed using appropriate equipment and dust curtains, and all enclosures shall be tied to a local exhaust ventilation system to capture and filter dust from the air. Additional best practice technologies and techniques shall be imposed as determined by CDPH."

#### **CITY RESPONSE:**

In response to the comments, CDPH revised Subsection 5.4 in the Proposed Rules to require the following specific guidance documents to be used in the design of the dust control plan:

- the Centers for Disease Control and Prevention's (CDC's) Dust Control Handbook for Industrial Minerals Mining and Processing (https://www.cdc.gov/niosh/mining/works/coversheet2094.html).
- IEPA's Aggregate Facilities Registration of Smaller Sources (ROSS) Program
   Guide
   (https://www2.illinois.gov/dceo/SmallBizAssistance/EnvironmentalAssistan
   ceProgram/Documents/Aggregate%20ROSS%20Sources%20factsheet revised%20Nov2018.pdf).
- US EPA's Fugitive Dust Control Measures and Best Practices
   (https://www.epa.gov/system/files/documents/2022- 02/fugitive-dust-control-best-practices.pdf).

CDPH believes the use of appropriate measures, as included in the above guidance documents, in combination with monitoring and detailed housekeeping documentation will minimize dust at the facility. However, as stated at the bottom of 5.4 of the Revised Proposed Rules, CDPH may require additional BMPs should it determine the current site control to be ineffective. Additional controls may include the use of partial enclosures, windscreens, and dry-based controls that capture, clean and exhaust dusty air, similar to the LEVs mentioned by CEJN.

# H. General Layout of Facility (Rule 3.8.5)

Rule 3.8.5 provides that the Design Report for New or Expanding Facilities must include drawings that depict certain items. With regard to the requirement in 3.8.5.1.9 to show the location of fire suppression equipment and areas where torch cutting and similar activities take place, Reliable commented that none of these activities are regularly occurring at rock crushing facilities. Reliable further pointed out that Rule 3.8.5.1.3 references "fixed equipment," referencing their comment that the definition of "Modification" should be revised so as not to include changes in facility configuration or capital improvements.

#### **CITY RESPONSE:**

An applicant may indicate "not applicable" if the activity does not take place at the facility. In regards to "fixed equipment," the Revised Proposed Rules defined "fixed equipment" as "structures and fixed equipment shall mean structures, machinery, and equipment that may be movable but are typically fixed or stationary and are used solely at the Facility, used in the storage, Processing, and handling of Reprocessable Construction or Demolition Materials, Incidental Debris, or Waste and may include, but are not limited to, buildings, crushing devices, grizzly or mechanical screens, conveyors, or storage bins."

# I. PAVEMENTS (Rule 3.8.6)

Rule 3.8.6 contains requirements for the paving of all roads and parking areas within all rock crushing facilities.

# a. Strength of pavement

Several of the NGOs commented that this section should specify that the pavement must be "sufficiently strong and robust to withstand the degree of heavy-duty vehicle operations to be undertaken at the facility, as well as to prevent contamination of soil, water, and air." NRDC, IEC, and others stated that pavements must be able to withstand over time the amount of force involved with continuous operation of heavy-duty vehicles, given the history of pavement issues at similar facilities. IEC further noted that CDPH should "evaluate whether Chicago's general purpose vibration requirements are sufficient for this industry."

Relatedly, CEJN suggested that a new section 3.8.6.1.1 be added to the rules to address vehicle use in the Design Report. The new language should require: "A plan scaled drawing and technical description of stabilized construction exits at each point where a vehicle will travel from unpaved roads to pavement on or offsite."

#### **CITY RESPONSE:**

In response to NGO's comments on strengthening the pavement requirements, CDPH agrees that the applicant must demonstrate proposed pavements are adequately designed for the vehicle intended loading and usage. Accordingly, CDPH added the following sentence in the Revised Proposed Rule:

"Narratives and drawings shall reference the applicable federal, state, or local design specifications followed to ensure pavement can support and is sufficiently durable for the intended loads and uses."

For pavements other than concrete or asphalt, the Revised Proposed Rule also requires the applicant to demonstrate that proposed paving will prevent dust, standing water, potholes, and the track-out of materials. Such demonstration may include the use of stabilized transition points between non-paved and paved surfaces like those specified in the Illinois Urban Manual<sup>12</sup>. Also gravel or similar roadways should meet industry or governmental design standards such as the Federal Highway Administration's Gravel Roads Maintenance and Design Manual<sup>13</sup>.

CDPH will require the applicant to demonstrate compliance with 8-32-150 of the MCC if it determines that vibrations may have the potential to exceed the limits set forth in that chapter. For instance, CDPH may require such a demonstration from New or Expanding Facilities that have truck traffic or have heavy mechanical equipment located near the boundary of a residence, business, or commercial district.

# b. Commissioner approval

With respect to the provision that allows other paving materials besides concrete or hot-mix asphalt "when deemed appropriate by the Commissioner," Reliable and IAAP commented that Commissioner approval should not be necessary for paving of roads and parking areas. However, if this provision is retained, they stated that the rule should specify the circumstances under which the Commissioner may consider other materials appropriate.

#### **CITY RESPONSE:**

The paving requirement is to help ensure fugitive dust does not escape the facility through air dispersion and track-out. According to U.S. EPA's AP42, paving has an estimated 99 percent control efficiency for particulates over unpaved roads. Paved roads also facilitate sweeping and cleaning.

For the above reasons, all internal roadways and work areas traveled by heavy equipment within 100 feet from a public way or adjacent property must be paved with concrete or bituminous concrete. Surfaces not traveled by heavy equipment within 100 feet from a public way or adjacent property do not have to be paved with concrete or asphalt but must follow appropriate technical guidance manuals (e.g., the Federal Highway Administration's Gravel Roads Maintenance and Design Manual) or designed by a qualified pavement engineer or professional and must be approved by the Commissioner.

<sup>&</sup>lt;sup>12</sup> https://illinoisurbanmanual.org/wp-content/uploads/2018/08/930-Stabilized-Construction-Entrance.pdf

<sup>&</sup>lt;sup>13</sup> https://www.epa.gov/sites/default/files/2015-10/documents/2003\_07\_24\_nps\_gravelroads\_gravelroads.pdf

# J. Site Security (Rule 3.8.9)

Reliable recommended that the phrase "secure from unauthorized access" be changed to "secure from unauthorized entry." They stated that facilities are generally able to limit and control entry, but they cannot be responsible for unauthorized access, especially considering easements and/or common use roadways shared by adjacent property owners.

#### **CITY RESPONSE:**

CDPH agrees and changed "access" to "entry" in the Revised Proposed Rules.

# K. Structures and Fixed Equipment (Rule 3.8.10)

With regard to the requirement that the Design Report include certain information about all structures and fixed equipment, Reliable and IAAP stated that the term "structures and fixed equipment" should be defined or changed to "Material Processing / Handling Structures." They stated that, otherwise, office buildings, security gate houses, and toilets could all be considered "structures" under this requirement. Reliable reiterated this comment with respect to the requirement for detailed design drawings and manufacturers' specification sheets for all structures and fixed equipment in Rule3.8.10.1.3.

#### **CITY RESPONSE:**

See CDPH response in General Layout of Facility (Rule 3.8.5) 6(H) above.

## L. Tipping Floor and Storage Capacity (Rule 3.8.11)

In this section, as well as, specifically, in Rule 3.8.11.1.1, Reliable requested that CDPH change the word "floor" to "Area" and the word "Staging" to "Storage." They stated that rock crushing operations do not typically use "tipping floors."

## **CITY RESPONSE:**

See CDPH response in <u>Tipping Floor</u> 2(C) above.

# M. Water Drainage (Rule 3.8.12)

Reliable requested that CDPH delete Rule 3.8.12.1.3, which requires a demonstration regarding the capacity of any receiving sewer system to handle the quantity of stormwater and wastewater from the Facility. Reliable stated that Section 3.8.12.1.1, requiring an approved stormwater management plan, is sufficient documentation of the stormwater management required under the City code. They further commented that, in 3.8.12.1.4, the word "may" should be changed to "shall," stating that drainage review is only necessary for Facility expansions that trigger a review by Department of Buildings stormwater regulations.

# **CITY RESPONSE:**

As discussed in the City of Chicago Stormwater Management Ordinance Manual<sup>14</sup>, the information under 3.8.12.1.3 is necessary to determine the allowable peak discharge from a property. While this information is a typical component of a storm water management plan, to ensure completeness, this subsection remains unchanged in the Revised Proposed Rules. To reduce paperwork burden, the applicant may simply reference pertinent sections or pages of the stormwater management plan to satisfy this requirement.

Similarly, to allow flexibility, the word "may" under 3.8.12.1.4 was also retained in the Revised Proposed Rules. This is, for instance, when an increase in the rate and volume of runoff, other than from the physical expansion of the Facility, occurs as the result of increased imperviousness, grading, or other improvements at the Facility.

# N. Traffic (Rule 3.8.13)

The Proposed Rules require all facilities to demonstrate that the Facility is designed and located to minimize the impact on the existing traffic flow and to provide certain information, including an idling reduction plan. Additional information, including a traffic study, is required of New and Expanding facilities.

# a. Idling reduction plan

NRDC stated that, in addition to the idling reduction plan, CDPH should expressly reference Zero Emission technologies as alternatives to diesel sources and incorporate Zero Emission technologies in its case-by-case consideration of facilities under the Proposed Rules, as part of the overall charge to minimize idling by and emissions from diesel sources.

ELPC noted that, while Section 3.8.13.1.3 requires an idling reduction plan that demonstrates compliance with the anti-idling ordinance, section 9-80-095 in the Municipal Code, and that minimizes unnecessary idling, there is no apparent enforcement mechanism to ensure that there is no idling. They further stated that "existing checks under Section 9-80-095 are already problematic with the current inability to report idling via the [City's] 311 applications. Even if this reporting method was functional, there must still be an enforcement mechanism to curtail air pollution via idling in the Proposed Rules."

# **CITY RESPONSE:**

CDPH believes that the promotion of Zero Emission and other technologies over more polluting fuels such as diesel is beyond the scope of these rules, and more effectively addressed in broader planning, policy, and rulemaking.

CDPH will incorporate the Facility's anti-idling plan and require the posting of signage at the Facility into the permit conditions.

<sup>14</sup> 

https://www.chicago.gov/content/dam/city/depts/water/general/Engineering/SewerConstStormReq/2016StormwaterManual.pdf

# b. Traffic study requirement

Reliable commented that the traffic-related Design Report requirement should apply to New and Expanding Facilities only, stating that: "Traffic is not reasonably related to CDPH's mission with respect to Reprocessable Facilities. Requiring Existing Facilities to monitor and model existing traffic is costly and onerous for the Facility and does not benefit Human Health and the Environment." They further stated that "City Zoning and CDOT already review traffic studies when analyzing whether a Facility may be sited at the property. This tri-annual review will create regulatory outcome uncertainty that will limit investment in the Facility." Thus, Reliable requested that the Rules 3.8.13.1.4, 3.8.13.1.5, and 3.8.13.1.6 all be deleted.

Similarly, IAAP commented that a traffic study should not be required every three years. They stated that the cost of an engineered traffic study ranges from approximately \$5,000 to \$15,000 or more, and that "traffic regulation is outside the purview of CDPH."

## **CITY RESPONSE:**

The Proposed Rules did not require Existing or Modifying rock-crushing facilities to conduct formal traffic studies that would require a professional traffic consultant. Specifically, subsections 3.8.13.1.5 through 3.8.13.1.8 are only required for New and Expanding Facilities. Existing facilities must still provide the information in 3.8.13.1.4 regarding the listing of designated roadways used by the Facility. Such information is necessary to determine traffic and air quality impacts to the surrounding community and does not need a traffic professional to prepare.

# O. PARKING (Rule 3.8.15)

Reliable commented that CDPH should delete the requirement for New and Expanding Facilities to provide information about parking areas. They stated that facilities must already demonstrate that they have zoning approval, and that submitting to "a re-review of zoning by CDPH" is redundant and unnecessary.

## **CITY RESPONSE:**

As with the waste and recycling facility permits, CDPH's reprocessable C/D material facility permit is intentionally comprehensive to ensure CDPH can perform its duty to protect public health and the environment, reduce nuisances, respond to citizen complaints, assist with emergencies such as HAZMAT incidences, and conduct or compel environmental mitigation as necessary, attributable to or arising from these facilities' operations.

Given the above, CDPH's documentation requirements must be exhaustive and often include documentation already required by other regulatory agencies, including documentation showing compliance with zoning parking space requirements. This specific information helps demonstrate to CDPH that the Facility has adequate parking and will not stage vehicles and trucks on the public way or neighboring properties and provides more detailed information on the location of mobile-source emissions at the Facility, including where they may park or idle.

For the above reasons, to ensure completeness and avoid the back-and-forth correspondence between CDPH and the Applicant, and the fact that this information is readily available to the applicant, the requirement was retained in the Revised Proposed Rules.

# P. PERIMETER BARRIER (Rule 3.8.17)

Reliable stated that CDPH should make the barrier requirement apply only to New and Expanding Facilities within 660 feet of a Sensitive Area and that it should be required to obscure operations only from the public way and adjacent non-PMD properties. They stated further that: "If proper setbacks exist from Sensitive Areas, the use of a Perimeter Barrier lacks any practical benefit to surrounding PMD uses." They also requested that the height requirement be changed from eight feet to six feet consistent with the Chicago Zoning Code. Finally, they requested the elimination of the requirement that the barrier be solid, because the "Chicago Zoning Code may require decorative landscape berming or other screening."

Reliable also requested CDPH to change this section for New, Existing, or Expanding Facilities, so that barriers are not required along a bridge, embankment, or a waterway if the Facility is more than 660 feet from a Sensitive Area, or if the barrier conflicts with zoning requirements. They further requested that the term "setback" be added to the list of adjacent features that may be considered in lieu of a barrier and requested that the requirement for Commissioner approval be removed, stating that "setback, screening, and security requirements are zoning issues."

IAAP expressed similar concerns, stating that "the perimeter barrier should not be an unnecessary expense, especially when an existing facility has already engineered and installed a perimeter barrier that complies with other program or permit requirements." They further stated that removing an existing fence to install a solid concrete barrier or block wall may cost in excess of \$150,000 (depending on length). Installing a steel fence could cost \$500,000 - \$750,000 for 10,000 linear feet."

# CITY RESPONSE:

The Zoning Code allows fencing up to eight feet in height (see section 17-5-0600 of the Zoning Code). CDPH also confirmed with the Chicago Department of Planning and Development's Zoning Administration that the fencing requirement in the Proposed Rules, including the solid eight-foot barrier height requirement, does not conflict with zoning standards for fencing.

CDPH requires eight feet solid barriers at certain facilities such as recycling facilities under 11-4-2640(d), lots storing lumber, metal, secondhand building material, and other types of materials under 7-28-070, and construction-site rock crushing operations via permit conditions. Thus the 8' height requirement is warranted and consistent with CDPH's existing rules and policies.

CDPH is allowing Existing Facilities to keep current chain-link or wrought iron fencing that is covered with meshing or metal slats. The Revised Proposed Rules also allow Existing Facilities to supplement the height of shorter fencing by planting trees or tall landscaping in front or behind them, subject to Zoning and Commissioner approval.

Lastly, the 660' setback from Sensitive Areas continues to have no bearing on the barrier requirement under the Revised Proposed Rules, as rock-crushing facilities can cause dust and other nuisance to adjacent commercial and other uses, not just residential and other Sensitive Areas.

The Proposed Rules and Revised Proposed Rules do not require fencing or barrier on the sides of the Facility along a waterway if the barrier interferes with loading operations or conflicts with zoning requirements. Also, the above rules allow adjacent embankments and rail lines to satisfy the requirement so long as such features meet the security and screening intent of this section. Specifically, they must be comparable in terms of durability and performance.

For the reason stated above, CDPH will not include distance setbacks to residential and other Sensitive Areas as a feature in lieu of a physical barrier.

# Q. STORMWATER POLLUTION PREVENTION (Rule 3.8.18)

Reliable commented that the requirement for a Stormwater Pollution Prevention Plan should be applicable to New facilities only; Existing, Modifying, or Expanding Facilities should be required to provide stormwater management in accordance with the City Building Code and State of Illinois stormwater regulations. They stated that if an Existing Facility is in operation and is not making changes that trigger statutory stormwater management review by the Building Department (e.g., changes in permitted processing volume per year), there is no basis or need for CDPH to evaluate stormwater management.

## **CITY RESPONSE:**

CDPH has basis to require and conduct the review of SWPPPs. Separate from City Building Code and State stormwater regulations, CDPH is responsible for and has authority under 11-4-1040(3) of the Ordinance to enforce 11-4-1040, prohibiting any person to discharge or cause to be discharged wastes or waters into any sewer, watercourse, natural outlet, or waters within or partially within or adjoining the boundaries of the City of Chicago. As such, and to ensure protection of public health and the environment, CDPH requires consequential facilities it permits that are adjacent to a waterway or that discharges to an MS4, to prepare and implement a SWPPP.

# R. NOISE IMPACT ASSESSMENT (Rule 3.8.19)

As specified in Section 11-4-2000(B) of the MCC, no owner and/or operator of a reprocessable C/D material facility shall receive, reprocess, remove, or transport any construction material or debris between the hours of 7:00 p.m. and 6:00 a.m. unless a waiver is granted by the commissioner. In this regard, the Proposed Rules require applications requesting such a waiver to include a noise impact assessment in the Design Report. However, the Proposed Rules also provide that a noise impact assessment is not required for temporary circumstances when the facility must remain open after hours to receive materials from government infrastructure projects. In such instances, the Facility must notify the Department and receive written approval from the Commissioner prior to operating beyond the normal operating hours.

ELPC commented that there is a potential loophole in the exception for government infrastructure projects. They stated that the rules should ensure that facilities are not allowed to receive material

from other projects at the same time as the government project. They further stated that "if there is receipt of material from government projects with material from non-governmental projects, the noise impact assessment should account for the cumulative impact of the projects."

CEJN requested that a new section 3.8.19.2.1 be added entitled "Public Notification," which would provide that: "Any applicant requesting a waiver to operate outside of the operating hours under Section 11-4-2000 (B) of the Code shall provide public notification of the application including date and time for operations exceeding the operating hours under Section 11-4-2000 (B) will begin, new operating hours, and contact information for complaints."

#### **CITY RESPONSE:**

CDPH agrees with ELPC that materials from non-governmental projects may not be accepted beyond standard hours without a formal noise assessment. When issuing waivers to operate after hours, CDPH expressly prohibits in the waiver conditions the acceptance of materials other than from the approved government project. In addition, in temporary circumstances when a Facility needs to remain open to receive materials from government infrastructure projects, the Facility must first obtain written approval from the Commissioner before doing so. CDPH commits to posting such notifications and subsequent approvals or denials on the Department's community information website.

# S. FIRE PREVENTION (Rule 3.9.5)

Reliable stated that CDPH should delete the rule requiring compliance with fire prevention laws and requiring a fire prevention and response plan. They stated that this is a legacy requirement adapted from metallurgical processing Facilities and is not justified as a requirement for Reprocessable Facilities. They further stated this rule (as well as the related rule in 5.8.12 mentioned below) is redundant with the Site Design Report requirements.

#### **CITY RESPONSE:**

Although the fire risks are lower than in other industries like waste and recycling, rock-crushing facilities still have fire vulnerabilities from fueling operations, the storage of flammable materials, and electrical fires from equipment. Certain rock-crushing facilities even operate adjacent to or within an asphalt plant or concrete plant. Given the above and the importance of a fire prevention plan to any business, the requirement was retained in the Revised Proposed Rules.

# T. FINANCING (Rule 3.9.13.1.5)

The Proposed Rules require all facilities to have a Closure Plan that includes Documentation to Demonstrate that sufficient financing is available to complete all Closure activities. ELPC commented that the Rules should prohibit financing mechanisms like self-bonding or self-insurance to ensure that taxpayers are not left to foot the bill if a permittee faces an unforeseeable financial hardship.

# **CITY RESPONSE:**

Pursuant to 11-4-2020 of the MCC, all rock-crushing facilities must post a financial assurance of a minimum of \$250,000.00. Such financial assurance shall be in a form of an irrevocable standby letter

of credit issued by a financial institution, in conformance with the Proof of Responsibility/ Security Requirements rules<sup>15</sup>. Per these rules, the City may draw on the security as follows:

- i. To assure the facility's compliance with the provisions of the MCC and these rules;
- ii. To assure compliance with the conditions of the permit;
- iii. To secure payment of the City's expenses in correcting any dangerous condition or defect existing in the facility permitted pursuant to Article XIV of Chapter 11-4;
- iv. To respond to any emergency created as a result of the operation of the facility permitted pursuant to Article XIV of Chapter II-4;
- v. To ensure facility and site closure and post-closure care in accordance with section 11-4-2020 and section 11-4-2000 and these rules and regulations promulgated thereunder;
- vi. To pay for actions related to facility and site closure and post-closure care appropriate to protect the public health and safety; or
- vii. If the permittee is adjudicated bankrupt.

Further, these rules require the permittee to take any action required to restore the letter of credit to its full amount within fifteen (15) days of written notice by the City of its withdrawal against the letter of credit.

# U. ENVIRONMENTAL ASSESSMENT (Rule 3.10)

The Proposed Rules require New or Expanding facilities to provide a copy of the environmental assessment prepared pursuant to the Chicago Zoning Ordinance. IAAP requested that the rule specify or reference the section of the Chicago Zoning Ordinance that requires an Environmental Assessment.

#### **CITY RESPONSE:**

The environmental assessment mandate for a new or proposed rock crushing facility is contained in 17-13-0902-B(2)(b)<sup>16</sup> of the MCC.

## V. AIR IMPACT ANALYSIS AND MONITORING

a. Air Quality Impact Assessment (Rule 3.8.21)

The Proposed Rules require all facilities to include an air quality impact assessment in their Design Reports. The assessment must include an emissions and air dispersion modeling study and a dust monitoring plan, as described below.

<sup>15</sup> 

https://www.chicago.gov/content/dam/city/depts/dol/rulesandregs/ProofofResponsibilitySecurityRulesFINAL.pdf

<sup>&</sup>lt;sup>16</sup> https://codelibrary.amlegal.com/codes/chicago/latest/chicagozoning\_il/0-0-0-51729

# b. Emissions and air dispersion modeling study (Rule 3.8.21.1)

Under the Proposed Rules, the air emissions study must evaluate PM10 emissions (that is, emissions of particulate matter less than or equal to 10 microns in diameter) that may be generated at the Facility from various sources, including equipment, stockpiles, material handling activities, and on-site diesel engines. However, diesel emissions from on-road mobile sources are not required to be included in the modeling study.

## c. Diesel emissions

NRDC commented that on-road mobile diesel engine emissions should be included in the minimum required air quality impact assessment (and that CDPH should amend the Large Recycling Rules to include them there too). They stated that these engines can cause significant "hot spots" of pollution around the facilities they serve, and that studies show disproportionate impacts of truck traffic on communities of color.

Relatedly, NRDC stated that CDPH should require evaluation of air pollutants more closely associated with localized creation of hot spots by diesel trucks, such as ultrafine particles (PM0.1) and nitrogen oxides (NOx, of which nitrogen dioxide or NO2 is the main indicator). They stated that ultrafine particles are a product of combustion associated with diesel vehicles, with many negative health effects distinct from (though overlapping with) PM2.5. They also cited CDPH's Air Quality Impact Evaluation Interim Guidance<sup>17</sup>, which requires 1-hour NO2 modeling, including on-road mobile source diesel emissions (and implicitly nonroad mobile diesel emissions, such as from forklifts, dozers and other mobile sources that remain at facility yards), demonstrating that NO2 modeling is feasible and should be required in the Proposed Rules as well. They further stated that "to the extent that CDPH finds it is not currently feasible to conduct similar modeling for ultrafine particles, CDPH should develop alternative methodologies for assessing a project's impact on ambient levels of ultrafine particles."

ELPC expressed similar concerns about "the limited scope of the emissions and air dispersion modeling study," stating that it "should include the listed parameters and diesel engines on-site, those coming inbound and going outbound. In modeling air quality, the applicant facility must factor in other pollution sources in at least a one-mile radius. The Rules should not exclude the modeling of diesel emissions from mobile sources, especially if the Applicant has control of those sources. The Applicant should also take existing traffic data and model it with its air quality study."

#### **CITY RESPONSE:**

Rock crushing facilities are already covered under the Chicago Air Quality Ordinance under the waste-related use category of Title 17-9 of the MCC. Accordingly, New and Expanding Facilities

<sup>&</sup>lt;sup>17</sup> The City's Air Quality Impact Evaluation Interim Guidance, dated September 2021, was created to assist site plan review applicants with the preparation of the air quality impact evaluation required by Section 17-9-0117-G of the Municipal Code of Chicago. The Interim Guidance is available here:

https://www.chicago.gov/content/dam/city/sites/air-quality-zoning/pdfs/Air-Quality-Impact-Evaluation-Interim-Guidance.pdf.

must prepare an air quality assessment pursuant to CDPH requirements. Currently, these requirements are set forth in CDPH's Air Quality Impact Evaluation Interim Guidance ("AQIS Interim Guidance"). The AQIS requires emissions modeling for stationary and mobile sources (both on-road and non-road sources) for the following criteria pollutants:

- PM10 (24-hour)
- PM2.5 (24-hour and annual average); and
- NO2 (1- hour and annual average).

Under the AQIS Interim Guidance, CDPH may use its discretion to request analysis of hazardous air pollutants (HAPs) emissions and will provide applicants in those cases with ambient air guidelines to be met. Similarly, CDPH may use its discretion to require submittal of a cumulative dispersion modeling analysis that incorporates the emissions of offsite sources if any modeled criteria pollutant exceed their respective Significant Impact Levels (SILs). Lastly, the AQIS Interim Guidance requires air dispersion modeling for the above criteria pollutants for all projectimpacted street intersections that:

- are at Level-of-Service D, E, or F with a significant number of diesel vehicles; or
- will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.

As discussed previously in this responsiveness document, the Revised Proposed Rules no longer requires air dispersion modeling for Existing facilities. However, as previously stated above, Existing Facilities must now submit a third-party evaluation of their dust control plan and provide CDPH a detailed air emissions inventory annually to allow CDPH to conduct an air-dispersion modeling of the facility as necessary.

As CDPH continues development of the AQIS Interim Guidance, CDPH will consider the issues raised by the commenters.

# d. Particulate matter

In addition to the evaluation of PM10 as required in the Proposed Rules, NRDC recommended that CDPH require PM2.5 estimation and modeling, as required in the City's CDPH's air modeling Interim Guidance (referenced above). As they stated, rock crushing activities "generate significant, localized amounts of fine particles, though the majority of particles from such mechanical activity will be in the larger fraction." Further, "available data for Chicago supports that the environmental justice areas in which these facilities are or are proposed to be located likely have elevated levels of PM2.5 overall and in relation to other Chicago communities, particularly along the roadways to/from the industrial areas in which they are sited." They again noted that these facilities are typically served by a number of heavy-duty vehicles that move materials around, to, and from the site, and that such vehicles can have significant impacts from both mechanical and combustion emissions.

Similarly, the IEC commented that proposed new and/or Expanding facilities should be required to conduct an air quality study under the City's "March Air Quality Ordinance."

#### **CITY RESPONSE:**

As explained above, New and Expanding Facilities are subject to the Chicago Air Quality Ordinance under the waste-related uses category. The table below taken from 17-6-0403-F Use Table and Standards shows Reprocessable Construction/Demolition Material Facility as a category of waste-related uses.

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2,	momerators	-	-	-	8	-	-	-	-	-	-	8	-	-	-	8	s	s	-	§ 17 9 0117
	Inomerators,- Municipal	-			,	,	-	-		s		s	-	s		s	s	s	,	§ 17-9-011
4-2	Liquid Waste Handling Facilities				-		s			s		s		s		s	s	s		§ 17-9-011
s, 3	Reprocessable Construction/De molition Material Facility				-		s			s		s		s		s	s	s		§ 17-9-011
	Resource Recovery Facilities						s			s		s		s		s	s	s		§ 17-9-011
7,	Sanitary Landfills		-	-	-	-	s	-	-	-	-	s	-	s	-	s	s	s		§ 17 9 011
8. 2.	Transfer Stations				-	-	s			s		s	-	s	-	s	s	s	-	§ 17-9-0117
0	Modified				-	-	s			s	-	s		s		s	s	s		§ 17-9-011

Table 1

# e. Crystalline silica

NRDC commented that the Rules should define and regulate PM4 crystalline silica, similar to California's inhalation reference exposure level of 3 ug/m3 for respirable particles of crystalline silica, which occur in the PM4 fraction. Noting that efforts to define and regulate PM4 crystalline silica have taken place primarily in the occupational setting, NRDC stated that they can and should be used for assessing community/environmental exposures as well, especially given the proximity of these facilities to homes, parks, and other places where the public congregates.

# **CITY RESPONSE:**

Although a PM4 evaluation is not required, PM4 falls between the PM10 and PM2.5 size fractions that require evaluation under the Chicago Air Quality Ordinance. In addition, the Revised Proposed Rules now require all rock-crushing facilities to conduct sampling on a triennial basis for lead, asbestos, silica, respirable particulates (particles under10 micrometer), and total dust. Previously, these were only required as part of monitor calibration. CDPH may use this data to adjust the PM10 RAL to account for the presence of these air contaminants in the PM10.

In addition, CDPH will review California's and other federal, state, and local standards for crystalline silica.

# f. Environmental justice and Cumulative Impacts

NRDC commented that CDPH should make clear that individual federal standards, such as the National Ambient Air Quality Standards (NAAQS) and minimum risk levels (MRLs), are not the sole measures by which CDPH should evaluate air impacts. They noted that significant health impacts occur at levels below the NAAQS and MRLs, and that this is a "critical concept in recognizing and addressing ongoing disparities in pollution burden across Chicago, which in turn CDPH is obligated to do."

Similarly, IEC stated that Facilities must use accurate data about existing air quality to gauge a facility's impact on emissions additions, as they are located near residential areas, parks and commercial areas in environmental justice communities. They proposed that CDPH seek out air quality data from the Chicago Environmental Justice Network (CEJN) and elsewhere, require onsite (and near site) baseline monitoring for use in modeling of proposed new or Expanded facilities, and emphasize the fact that individual NAAQS and MRLs or equivalent thresholds are not the only tests by which the CDPH will evaluate air impacts from proposed facilities.

ELPC stated that "given that many of the rock-crushing facilities are zoned into areas in or near environmental justice communities, the City should account for the cumulative impacts on the community where there is existing or will be new rock crushing facilities." In addition to adding diesel emissions from mobile sources, they stated that the Rules "should also require the Applicant to take existing traffic data and model it with its air quality study." They also stated that the public should be allowed to comment on the study's results.

#### **CITY RESPONSE:**

CDPH takes a number of factors into account when evaluating permit applications and compliance like taking into consideration stakeholder concerns, the applicant's compliance history and their ability to comply with the permit and ordinance requirements, and the potential burden to the community. CDPH has dedicated federal recovery funding to conduct a foundational cumulative impact assessment and refine it with new data over the next two to three years. As CDPH and partners develop best practices around cumulative impact, these findings can be used to develop a policy, in collaboration with other City departments and community stakeholders, that formally incorporates consideration of cumulative impacts into decision-making and ensures community voice in the process. The Mayor has already directed the City's Chief Sustainability Officer and CDPH to propose a new cumulative impact ordinance for consideration by the City Council.

As mentioned previously, New or Expanding facilities are subject to the Chicago Air Quality Ordinance that require emissions modeling for both stationary and mobile sources. As necessary, CDPH may conduct an AQIS for Existing facilities, using emissions inventory information collected from Existing facilities and traffic count data obtained from CDOT.

Finally, CDPH is seeking out air quality data from other sources, including Microsoft Eclipse network, to supplement federal ambient monitors in the detection of localized hotspots at sensitive and vulnerable areas.

g. Objection to air quality assessment/comparison to state and federal requirements

The industry commenters stated, generally, that the modeling requirements in the Proposed Rules are excessive and not warranted. Ozinga noted that the 2020 emissions from the crusher at one of its facilities was "less than one ton per year in particulate matter and less than 0.5 tons per year in particulate matter less than ten microns." Thus, they stated that "a modeling exercise for an emission release this low does not provide any environmental benefit."

Similarly, IAAP commented that this requirement lacks specificity and should be removed from the proposed rule. They stated that: "The purpose of air dispersion modeling is to understand impacts in the ambient air and not to evaluate emissions from each point or fugitive source of emissions. The modeling must also account for impacts from adjacent or surrounding sources, separate from the subject facility. The proposed rules do not provide for specific criteria for parameters of concern (i.e., PM, PM10, PM2.5) to produce effective and actionable modeling results." Reliable, likewise, objected to the requirement to conduct an AERMOD air dispersion modeling study without specifying any appropriate parameters, stating that the study "will serve only to derive unreliable and inconsistent data among modeled sources."

IAAP further noted that the Illinois EPA permit review process does not include a requirement to conduct modeling. Instead, facilities must calculate their potential to emit (PTE) air contaminants to evaluate which air permit classification the site falls under (i.e., minor, or major source). Through this process, most rock-crushing facilities are found to emit less than five tons of PM per year, the category with the smallest source of emissions, under the registration of smaller sources (ROSS) program. If a facility's emissions exceed five tons/year, the facility must obtain a more comprehensive permit. IAAP also noted that, in the Chicago region, the CAAPP Permit threshold for Particulate Matter is 100 tons per year. Thus, "If the majority of Reprocessable Construction Demolition Materials Facilities emit 95% less than the CAAPP annual threshold of particulate matter, then it is excessive and burdensome for these recycling sites to perform an Emission and Air Dispersion Modeling Study."

Reliable suggested that the Air Quality Assessment should be required only for facilities located within 660' of a Sensitive Area. They argued that CDPH "has not demonstrated a technical justification for writing rules for Reprocessable Facilities that are more stringent than the USEPA and ILEPA standards for monitoring or enforcement." In this regard, they cited a USEPA Region—5 - October 2021 report on Chicago ambient air, which "indicates that the items of concern are 'ozone' related NOx and VOC constituents that are not emitted by Reprocessable Facilities."

#### **CITY RESPONSE:**

Pursuant to the Chicago Air Quality Ordinance (Section 17-9-0117-G.l in the Zoning Code<sup>18</sup>), CDPH must review air impact evaluations and provide an opportunity for the public to review these reports. This reflects the City's determination that air dispersion modeling is critical at the siting phase of a proposed development and the importance of public input on air quality

<sup>&</sup>lt;sup>18</sup> https://chicago.legistar.com/View.ashx?M=F&ID=9265257&GUID=8D4F369C-5D23-44E1-BEB6-25C1E23E81F7

impacts. On the other hand, in the permitting context, CDPH no longer requires air dispersion modeling in the Revised Proposed Rules, but still requires monitoring. New or Expanding Facilities must now provide an AQIS as required under the Chicago Air Quality Ordinance. Note that rock-crushing facilities are considered a category under waste-related uses in the Zoning Code.

For Existing facilities, following USEPA Region V recommendations, the Revised Proposed Rules require a third-party evaluation of the Facility's dust control plan in lieu of the dispersion modeling. CDPH further requires submission of a detailed annual emissions inventory so that CDPH can conduct air dispersion modeling of the facility, as needed, to address citizen complaints, evaluate offsite impacts, and for possible siting of additional PM10 monitors.

# h. Monitoring plan (Rule 3.8.21.1.2)

NRDC commented that, given the differences between state and local requirements, CDPH should make explicit that applicants must submit a separate dust monitoring plan that addresses CDPH's Rules and not simply rely on a state operating program. Such a requirement will help avoid a situation where, for example, an applicant submits a state operating plan that lacks the quarterly testing plan mandated by CDPH's regulations. Alternatively, an applicant can rely on a single plan submitted for both purposes, if that plan in fact clearly addresses all applicable state and local requirements.

#### **CITY RESPONSE:**

CDPH removed references to the State Operating Program. The Revised Proposed Rules require applicants to submit a dust plan that complies with these rules and the permit.

# i. Objection to monitoring

Reliable commented that CDPH should remove the dust plan requirement. They stated that: "For three years, CDPH has been provided with continuous monitoring data by a 'New' Facility on 106th Street that does not support the continuance of those air monitoring efforts (in data reported by Chicago Rail and Port to CDPH), or the addition of monitoring costs to Existing or Expanding Facilities. CDPH should require Facilities adhere to the clear, enforceable standards recommended by the USEPA and in rules issued by the ILEPA."

Reliable further stated that the requirement in 3.8.21.1.2.a.ii to install a PM10 monitor "at each location of the Facility or Property determined in the air-dispersion modeling study to potentially exceed EPA's 24-hour standard for PM10 or relevant acute or chronic health screening limits or standards for the modeled HAPs" is "vague and ambiguous" and "inconsistent with the use of air dispersion modeling." In particular, Reliable stated that USEPA has never required the placement of monitors at "each location" that is modeled in excess of a NAAQS standard, instead allowing the use of a pre-selected grid of individual modeled receptors (citing USEPA's SO2 NAAQS Designations Source-Oriented Monitoring Technical Assistant Document, February 2016). Reliable stated that "there is no benefit to siting multiple monitors if one is sufficient to adequately characterize emission impacts."

Reliable also commented that the phrase "potentially exceed" in the Proposed Rules is "vague and ambiguous as it provides no standard upon which to determine with specificity when a PM10 [monitor] is required." They argued that "monitor placement should not be dependent upon a modeled exceedance of a NAAQS but rather on identifying the location or locations that can sufficiently characterize the PM10 impact from the Facility."

Finally, Reliable stated that the air modeling study required by Section 3.8.21.1.1 "is not required to determine compliance with USEPA's 24-hour PM10 primary NAAQS standard." They stated that, as drafted under Section 3.8.21.1.1, "the air dispersion modeling must merely 'evaluate airborne emissions' from the Facility and, therefore, will not "generate modeling data that can determine the placement of PM10 monitors based on the USEPA 24-hour PM10 NAAQS standard proposed under Section 3.8.21.1.2."

Similarly, Ozinga stated that "Due to their excessive nature and potential inaccuracies, PM-10 monitors should not be required for crushing operations. The majority of crushing operations possess Lifetime or ROSS permits, and IEPA does not require PM-10 monitors for these sites. Furthermore, PM-10 monitors do not account for the source of dust, which can be from the permitted site, a neighboring site, a roadway, or even an open field. PM-10 monitors can trigger a number of false positives. According to these regulations, a facility is considered in violation of a regulation even if the dust came from an outside source."

# **CITY RESPONSE:**

Pertaining to Reliable's request to remove the dust plan requirements based on data for **106th Street**, the situation at the Class V recycler at 106th Street is atypical from many rockcrushing facilities in Chicago for at least two reasons:

- i. Location of Dust Sources the 106th Street facility's operations are located at least one hundred feet to several hundred feet from the public way or neighboring properties. Their PM10 monitors are located at the corners of the property at the fence line, hundreds of feet away from dust-emitting activities. Therefore, dust levels detected by the 106th monitors, and leaving the facility, are much lower than they would be if the dust sources were closer to the fence line. In contrast, dust-emitting operations at typical rock-crushing facilities in Chicago are located much closer to the public way or neighboring properties.
- ii. No Crushing Activities For the entire three-year monitoring period, the facility was a Class V recycler and did not reprocess (crush) materials at the site. Therefore, the dust potential can be expected to be lower than a rock crushing facility of the same size.

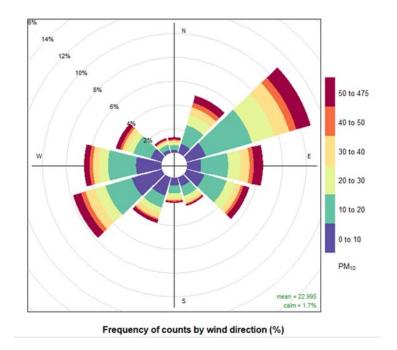


Figure 1

Despite the above, the 106th Street facility still experienced Reportable Action Levels (RALs). On the mornings of January 21 and 22 of 2022, the facility had RALS between 183 ug/m3 and 238 ug/m3. The figure above is a 3-year pollution rose for one of the monitors at 106th Street that shows a maximum PM10 concentration of up to 475 ug/m3.

In addition, the data completeness for 106th Street's four PM10 monitors averaged only about 58% complete. This low data completeness rate led to CDPH adding a requirement in the Revised Proposed Rules for applicants to submit a plan to ensure data completeness of at least 80%.

Given the above, the 106th Street's monitoring data does not rule out the need for monitoring at the site and at other rock crushing facilities. Facility fence line monitoring is needed until more complete and definitive datasets are available to suggest otherwise.

Pertaining to Reliable's comment that CDPH should require Facilities adhere to the clear, enforceable standards recommended by the USEPA and in rules issued by the IEPA, in terms of offsite fugitive dust and opacity standards, the rules set the same standards as EPA/IEPA requirements. Although CDPH is not enforcing NAAQS under these rules, the monitoring requirement and the RALs help ensure that the Facility, through early detection and mitigation, does not violate the NAAQS.

Pertaining to Reliable's comment that CDPH's use of dispersion modeling for placement of monitor is inconsistent and inappropriate use of air dispersion modeling, although the Proposed Revised Rules no longer require dispersion modeling, CDPH may conduct dispersion modeling to identify potential localized hotspots that may require monitoring. CDPH believes that modeling can be useful in siting monitors. Models identify receptor locations at risk of exposure to levels above NAAQS. Therefore, in addition to other observations, it is exactly the

kind of tool that should be employed in making informed decisions on where and when monitors would be most effective.

Pertaining to Reliable's comment that there is no benefit to siting multiple monitors if one is sufficient to adequately characterize emission impacts, the monitoring plan requirements under the Proposed Rules mirrors the requirements adopted under the Large Recycling Rules, that take into consideration the presence of Sensitive Areas, provide for the usage of much less expensive near-reference monitors, and real-time notification of RALs. If there are no Sensitive Areas within 660 feet and the modeling does not show an exceedance of NAAQS for PM10, a rock crushing facility is only required to install a single monitor. Offsite impacts are not limited to Sensitive Areas but also can be experienced by receptors at adjacent properties, including those that are commercial, business, or manufacturing that are less intensive in nature.

Pertaining to Reliable's comment that the term "potentially exceed" is vague and ambiguous in considering the addition of monitors that may exceed NAAQS, in the Revised Proposed rules, CDPH clarified that the term "potentially exceed" means the highest modeled 24-hour concentration of PM10, plus the three-year design value for PM10 as published by CDPH<sup>19</sup>. The locations where these PM10 concentrations exceed 150 ug/m3, would be the location for additional monitors.

Pertaining to Ozinga's comment that PM-10 monitors should not be required for crushing operations because they are excessive and potentially inaccurate, USEPA's Air Sensor Guidebook<sup>20</sup> sets tiers for sensor capabilities according to intended applications. See table below.

Tier	Application	Pollutants	Precision and Bias Error			
I	Education and Information	All	<50%			
II	Hotspot Identification and Characterization	All	<30%			
III	Supplemental Monitoring	Criteria pollutants, Air Toxics (incl. VOCs)	<20%			
IV	Personal Exposure	All	<30%			
V	Regulatory Monitoring	PM2.5, PM10	<10%			

Table 2

CDPH requires the use of appropriate sensors that meet at least EPA's Tier III (Supplemental Monitoring) or Tier V (Regulatory Monitoring) requirements. The near-reference PM10 monitor requirement aims to meet the Tier III specification, while FEM monitors have the most stringent

<sup>&</sup>lt;sup>19</sup> https://www.chicago.gov/city/en/sites/air-quality-zoning/home/resources-for-applicants.html

<sup>&</sup>lt;sup>20</sup> https://cfpub.epa.gov/si/si\_public\_file\_download.cfm?p\_download\_id=519616&Lab=NERL

requirement at Tier V. The rules require near-reference monitors to be calibrated against laboratory-grade data derived from gravimetric sampling. CDPH believes either type of monitor is well suited for the determination of RALs.

In addition, applicants are exempted from the monitoring requirements if they meet all the conditions under 7.15.3(h) or have been successfully granted a variance under Section 10 of the Revised Proposed Rules.

Pertaining to Ozinga's comment that a facility can be considered in violation of the rules even if the dust came from an outside source, the exceedance of an RAL in itself is not a violation under the Rules. Instead, regardless of the source (onsite or offsite), the Rules require certain actions such as the identification and mitigation of the dust episode as necessary, and to record the RAL and the actions taken in the Operating Record within 24 hours.

j. Calibration Plan (Rule 3.8.21.1.3 and 3.8.21.1.4)

Reliable commented that the rules should not assign the Commissioner unspecified authority to "require the air sampling of other contaminants that may be emitted from the Facility." They noted that "air sampling of pollutants other than PM10 can require wholly separate air dispersion modeling to appropriately site new and additional air monitors. The proposed rule must identify those sampling and modeling parameters."

While reiterating its comment that "PM-10 monitors are excessive and unreliable," Ozinga stated that "testing for the listed components should not be required if a Safety Data Sheet shows there are no levels of a component in the crushed material." Specifically, they stated that their Ozinga-Lumber Street facility "only crushes leftover Ozinga-produced concrete product. Asbestos would not be found in the crushed concrete since there was no ACM in the original production of the concrete. Therefore, certain testing requirements should be excluded if documentation shows a component is not present in the product."

#### **CITY RESPONSE:**

CDPH agrees that the effective siting of monitors for other pollutants may necessitate additional modeling. For example, as mentioned by NRDC, crystalline silica often occurs within the PM4 size fraction. Therefore, modeling the dispersion of PM4 may better inform the placement of monitors. Similarly, sampling for gases such as NO2 may benefit from air dispersion modeling of gases in AERMOD. However, as previously mentioned, the Revised Proposed Rules no longer require dispersion modeling. If CDPH determines that additional monitors for other contaminants are necessary, CDPH may conduct any necessary modeling itself or may provide guidance to complete such efforts.

The Commissioner is granted broad duties and powers under the Environmental Protection and Control Ordinance (Chapter 11-4 of the MCC) to protect human health and safety and the environment. The sampling and monitoring requirements under the rules are reasonable and necessary to identify and mitigate potential adverse impacts on public health and the environment. Aside from PM10, CDPH requires the triennial sampling of contaminants that have a reasonable potential to be emitted at unhealthy levels from rock-crushing operations.

# k. Dust Prevention and Dust Suppression (Rule 3.9.4)

The Proposed Rules require the Operating Plan to include a listing and technical specifications of all Airborne Dust Prevention and all Airborne Dust Suppression measures deployed at each reprocessing device, conveyor, material drop point, and stockpile location, during freezing and non-freezing conditions. This section further provides that CDPH may require alternate forms of control if the Commissioner determines the above-proposed measures to be inadequate based on recurring violations. CEJN requested that CDPH add the following language at the end of the first paragraph of this rule:

"CDPH shall require all Airborne Dust Prevention and Airborne Dust Suppression measures utilize industry best practices including but not limited to the use of water, baghouses, local exhaust ventilation systems, enclosures, dust curtains, sweeping, and diligent and frequent equipment maintenance and repair. Design, operation, and maintenance of all Airborne Dust Prevention and Airborne Dust Suppression equipment shall be in accordance with best practice technologies and techniques as determined by CDPH."

CEJN further suggested that CDPH add a new paragraph 3.9.4.1, entitled "Water Suppression and Water Spray," which would state that:

"If water is used on site to control dust, best practices as determined by CDPH shall be followed and used in conjunction with other dust control measures. Site and material specific water suppression plans shall be subject to CDPH approval."

#### **CITY RESPONSE:**

See CDPH response to <u>Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7)</u> comments.

# 7. OPERATING STANDARDS (Rule 4.0)

#### A. Enclosure

Similar to CEJN's comment above, NRDC stated that CDPH should add an enclosure requirement for processing areas and storage piles to the greatest degree feasible. Alternatively, they commented that if CDPH does not mandate enclosure of processing and handling operations, it should at minimum require cessation of outdoor processing and handling operations during periods of high winds, citing CDPH's Bulk Material Rules as an example.

# **CITY RESPONSE:**

The Revised Proposed Rules include enclosures as one of the measures the Commissioner may require if current measures are deemed by CDPH to be inadequate.

# B. Material Moisture Content (Rule 5.4.2)

Ozinga stated that the requirement to measure moisture content every week is excessive and unnecessary, noting that: "Due to the high relative humidity in Chicago (approximately 70%), the moisture content of stone, concrete, and practically all construction materials will easily exceed 1.5 % by weight."

#### **CITY RESPONSE:**

This requirement was taken directly from IEPA's Aggregate Facilities Registration of Smaller Sources (ROSS) Program Guide<sup>21</sup>, and adopts existing best practices already required by other regulators. In addition to the IEPA requirements, CDPH understands the testing of moisture content is a component of regular testing to certify aggregates meet the Illinois Department of Transportation's (IDOT) aggregate certification standards. CDPH further understands that certain facilities minimize emissions from material stockpiles through more frequent measurements of moisture content using an aggrameter<sup>22</sup>. For these reasons, this requirement is common practice and is not excessive or unnecessary.

To bring more consistency with IEPA requirements, CDPH added in 7.4.2 of the Revised Proposed Rules that the moisture testing requirements may be waived, in whole or in part, upon Demonstration and prior written approval by the Commissioner that the moisture content of Reprocessable Construction/Demolition Material stockpiles, as stockpiled and shipped is at least 1.5%. Such Demonstration may include site and material specific data, covering at least a one-year period, showing that the moisture content of the proposed material to be waived never falls below 1.5%.

# C. Incidental Debris (Rule 5.4.3)

NRDC commented that CDPH should define the term "incidental debris" to provide clarity on the nature of this material as opposed to "reprocessable" or reprocessed material, as well as "waste" material and any other material that may be handled by these facilities. To the extent that "incidental debris," or any other material, is similar to a recognized byproduct of C&D reprocessing known as "recovered screen material," and/or if any such material or debris otherwise has the potential to contain toxic or hazardous substances such as polycyclic aromatic hydrocarbons, lead and other heavy metals, CDPH should adopt provisions addressing this material that take into account its composition and the material's potential impact on soil and water, along with air, citing "Stormwater, New Life for C&D," Aug. 23, 2013, available at https://www.stormh2o.com/bmps/article/13008348/newlife-for-cd.

#### **CITY RESPONSE:**

<sup>&</sup>lt;sup>21</sup> https://cfpub.epa.gov/si/si\_public\_file\_download.cfm?p\_download\_id=519616&Lab=NERL

<sup>&</sup>lt;sup>22</sup> An aggrameter is used for instantaneous determination of the moisture content of sand, fine aggregate and coarse aggregate using a unique microwave sensor.

Per 11-4-1910 of the MCC, "incidental construction/demolition debris" or "incidental debris" shall mean uncontaminated dirt, metal, mortar, gypsum, plasterboard, wood, and sand which are derived from a construction or demolition-site and intermingled with reprocessable material. Although the percentage of incidental debris in a load cannot exceed 20% by ordinance and permit conditions, rock crushing operators will likely accept less than this amount to ensure they produce products that meet IDOT specifications and to minimize the amount of waste that they must dispose of.

Primary pollutants of concern from reprocessable materials are lead and asbestos, as previously discussed. They may also contain PNAs from paving asphalt. Regarding lead, the Rules require composite sample of each aggregate product to be collected and tested for extractable lead using SW846 Test Method 1311-Toxicity Characteristic Leaching Procedure (TCLP). This test measures the amount of lead that may leach from the material and contribute to ground and water contamination. To ensure that incidental debris and reprocessing residue are disposed of properly, the Revised Proposed Rules require the quarterly report to include a copy of the most recent waste characterization data for each waste stream generated at the Facility.

Generally, facilities that do not reprocess materials generated offsite, such as a concrete plant reprocessing their own concrete that they produce, are not subject to the Rules.

## D. Testing of Materials (Rule 5.6)

Reliable commented that CDPH should change the required frequency of testing from "every (2) two months or as specified in the permit" to "once per year," stating that reprocessable Facilities are prohibited from handling materials that are likely to contain lead. They further stated that materials processed at Reprocessable Facilities specifically exclude demolition materials other than concrete, asphalt, and other building materials not associated with lead content.

IAAP commented that the testing requirement should be removed. They stated that reprocessable construction demolition materials are not known to contain any known concentrations of lead. They further stated that, upon registration with IEPA, if a site believed that lead was present in any of its material, they would be required to identify this source of emissions and type of pollutant. According to IAAP, this unnecessary testing will require an annual expense of approximately \$3,000 per site.

Similarly, Ozinga stated that these tests are unnecessary since crushed stone and concrete do not have lead. As an alternative, Ozinga proposed that if a company submits a Safety Data Sheet for a finished product which shows no lead compounds, the facility shall be exempt from this requirement.

#### **CITY RESPONSE:**

As previously discussed, the reprocessable construction/demolition material feedstock may contain lead and asbestos. The sampling frequency of once every two months is based on the maximum that may be required per 11-4-1980 of the MCC. This frequency appears to be half what IDOT requires to reuse construction and demolition debris. For instance, under its 8-08.2 Policy Memorandum for

Construction and Demolition Debris Sand as a Fine Aggregate for Trench Backfill<sup>23</sup>, IDOT requires suppliers to run a detection program for lead and asbestos, with a sampling and testing frequency of one sample per calendar month, unless changed by IDOT based on historical testing.

# E. Vehicles and Equipment (Rule 5.7)

### a. Best practices

CEJN commented that CDPH should add a new sentence at the beginning of 5.7.1 to provide that: "All inbound and outbound trucks within the Facility's control shall have the latest engine type with the lowest combustion and/or emission levels available." They further stated that the rule requiring vehicles and equipment to be operated in a manner that minimizes emissions should also require such vehicles and equipment to be "maintained according to CDPH-determined best practices in a manner that minimizes emissions and noise pollution."

### **CITY RESPONSE:**

The majority of inbound and outbound trucks at Rock Crushing Facilities are typically owned and operated by third party entities, and therefore, often beyond the control of the Facility. In addition, engine emission standards are beyond the scope of these rules.

CDPH does not currently set explicit best practices for equipment maintenance to minimize emission and noise but does require the Facility's operating plan to document and follow equipment manufacturer recommendations and to comply with state and federal standards.

## b. Diesel engines

NRDC commented that diesel emissions are caused not only by trucks coming and going from the site, but also from diesel engines onsite, such as nonroad vehicles (construction equipment) and mobile energy sources/generators. They stated that "nonroad engines – in particular, older ones that operate on a non-continuous basis and so emit air pollutants at a relatively high amount – can be a substantial source of air pollution. According to air quality experts, such old and dirty engines may account for a large NO2 signal on Chicago's Southside. Given these impacts and available control measures, CDPH should acknowledge and address these vehicles and other diesel engines as part of its duty to protect public health and to address health disparities and civil rights."

NRDC further stated that "CDPH should note that diesel mitigation measures may entail changing the design and/or capacity of facilities to reduce their reliance on diesel engines, requiring the cleanest available diesel engines instead of allowing older and dirtier engines, and/or requiring other 'offsetting' reductions from other, comparable sources of air pollutants associated with the proposed use."

<sup>&</sup>lt;sup>23</sup> https://idot.illinois.gov/Assets/uploads/files/Doing-Business/Manuals-Guides-&-Handbooks/Highways/Materials/Aggregate/8-08%20debrissand.pdf

#### **CITY RESPONSE:**

Older engines using outdated technology emit greater pollution such as PM2.5 and NO2 than newer engines using more modern technologies. Consequently, the Rules require applicants to provide the quantity and Tier rating of all diesel-powered equipment maintained at the Facility, for emissions inventory and dispersion modeling purposes to assess impacts to surrounding properties. As previously mentioned, the Revised Proposed Rules require the Facility to submit an emissions inventory report to CDPH each year.

Under the Air Quality Ordinance, the City requires New and Expanding Facilities to account for these emissions as part of the AQIS and will be considered by CDPH in making its recommendation to the Zoning Administrator. Such recommendations may contain include the recommendations suggested by NRDC, as deemed necessary to reduce the burden on already vulnerable communities.

# c. Zero-emission technology

NRDC stated that CDPH should commit in these rules to reassessing the availability/feasibility of Zero Emission technologies to replace diesel in permit renewals.

Relatedly, CEJN commented that Rule 5.7 should include a new requirement that "Each Facility shall be designed as electrification-ready such that emerging zero-emission technologies for equipment and vehicles may be easily installed and operated on site as available within CDPH's discretion. All vehicles and equipment shall be electrification-ready and/or outfitted with zero emission technologies to the greatest extent feasible."

### **CITY RESPONSE:**

As stated in CDPH's response to earlier comments, CDPH believes electrification and the use of Zero Emission technologies are beyond the scope of these rules.

## d. Railcars and Barges (Rule 5.7.2)

CEJN stated that CDPH should require railcars and barges to be loaded in a manner that will control dust through the use of best management practices such as, but not limited to, enclosures, the use of solid covers, telescoping load booms, dust chutes, and the application of dust suppression agents and/or water.

#### **CITY RESPONSE:**

The Rules require that "railcars and barges must be loaded in a manner that will control dust through the use of best management practices such as, but not limited to, the use of solid covers, telescoping loading booms, dust chutes, and the application of dust suppression agents and/or water."

Regarding enclosures, see CDPH's response in Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7) comment above.

#### e. Emission controls

ELPC stated that the rules could be more protective by requiring measurement of PM2.5 from Vehicles and Equipment referenced in Section 5.7. They stated that CDPH should require vehicles (especially inbound and outbound trucks), railcars, barges, and stationary equipment to be electric or at least meet stringent emission standards (such as California Air Resources Board Optional Low NOx Standards for heavy-duty engines).

Similarly, CEJN requested an additional requirement be added that "All stationary mechanical equipment shall be electrification-ready and operate with the lowest combustion and/or emissions levels possible."

#### **CITY RESPONSE:**

Consistent with previous Bulk Material Rules and the Large Recycling Rules, CDPH requires the monitoring for PM10 as this size fraction<sup>24</sup> is expected to be generated at these operations and also includes PM2.5. In addition, the Revised Proposed Rules require the triennial sampling for respirable dust at each monitor location. To protect human health, CDPH will adjust the RAL in the permit conditions as needed based on the respirable fraction in the PM10.

On CEJN's comment regarding electrification or using alternative fuels for onsite equipment, CDPH's position on the electrification of stationary equipment and alternative fuels are beyond the scope of these rules.

## f. Vibrations

NRDC commented that CDPH should add vibration requirements in the Proposed Rules, noting that C&D processing "can entail use of heavy oscillating and rotating equipment, which creates steady-state and impact vibration." They recommended that "Buffers and other measures should be required to ensure that vibration from these facilities does not negatively impact the surrounding community. To the extent that Chicago already has general-purpose vibration requirements, CDPH should evaluate whether those are sufficient for this industry and incorporate them by reference/amend the Proposed Rules accordingly."

#### **CITY RESPONSE:**

See CDPH's response to Rule 3.8.6(a) Strength of pavement\_above.

### g. Noise

CEJN commented that CDPH should add a new section "5.7.4 Equipment Noise Mitigation," which would provide that:

"The Facility shall follow best practices for vehicle and equipment noise control and reduction specific to the Facility's operation, including but not limited to:

<sup>&</sup>lt;sup>24</sup> OSHA defines respirable dust as "being no larger than four microns in diameter."

- a. Utilizing quiet equipment models or modifying equipment to address and reduce noise pollution;
- b. Conduct frequent and diligent routine maintenance and repair of all noise producing vehicles and equipment;
- c. Control loud machinery with the use of constructed barriers or blankets;
- d. Incorporate setbacks or buffer zones between noisegenerating equipment or vehicles and residential areas to the facility's design plan; and
- e. Provide information on how to place a noise complaint to residential, recreational, and commercial property tenants within 2 blocks of the Facility."

#### **CITY RESPONSE:**

Setbacks to residential areas are established under the Zoning Code. Based on analysis in GIS, CDPH determined that the minimum and average distance between a rock crushing facility and the nearest residentially zoned property in Chicago is about 206 feet and 1,122 feet respectively. CDPH has never received a noise complaint against the facility located at said minimum distance. A search in CDPH's complaint database for the terms "concrete," "crush," and "aggregate" did not produce any noise-related complaints against a permitted rock crushing facility.

Despite the above, CDPH still ensures noise levels do not exceed City requirements by requiring a noise assessment for operations occurring beyond standard hours (for facilities that accept materials from non-governmental project). Facilities not required to conduct a noise assessment must still comply with City noise standards.

Citizen complaints, including noise complaints, should be made through the City's complaint system by calling 311 or filing the complaint online <u>at</u> https://www.chicago.gov/city/en/depts/311.html.

## F. AIR QUALITY STANDARDS AND MONITORING (Rule 5.8)

a. Fugitive Dust Preventive measures

IAC and others stated that CDPH should mandate preventative measures to reduce the spread of fugitive dust including the following requirements:

- Enclosure of processing areas and storage piles should be required as they reduce the spread of fugitive dust.
- Ceasing operations during high wind conditions, especially for outdoor Bulk Solid Material piles.

- Requiring use of Zero Emission technologies and other diesel mitigation measures.
- Requiring evaluation of ultrafine particles and NO2 under proposed rules.

CEJN recommended that rules include a specific requirement that "CDPH shall impose best practice requirements for fugitive dust control."

### **CITY RESPONSE:**

Regarding enclosures and dust best management practices, see CDPH responses to Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7) comment above.

Regarding high winds, see CDPH response to State rule comments below.

Regarding Zero Emission technologies and diesel mitigation, see CDPH responses to Diesel engines and Zero-emission technology comments above.

Regarding evaluation of ultrafine particles, see CDPH response to AIR IMPACT ANALYSIS AND MONITORING comments above.

#### b. State rule

In the prohibition of fugitive dust, Reliable requested CDPH to add a reference to the State rule, 35 Ill. Code § 212, noting that "The USEPA and the ILEPA have provided clear standards for enforcement and operational compliance in the State of Illinois. If the CDPH specific rules conflict with ILEPA standards, then the state-wide standard rules, adopted through scientific study and deliberation, should be applicable."

Similarly, IAAP stated that this section should include a reference to 35 IAC 212.314 and provide an operator the ability to utilize the "Exception for Excess Wind Speed", particularly during routine inspections or enforcement actions.

#### **CITY RESPONSE:**

The Rules incorporate by reference pertinent federal and state standards regarding the measurement of visible dust and opacity limits. CDPH's enforcement of the opacity limits is conducted by inspectors with current EPA Method 9 certification. CDPH inspectors are primarily certified through IEPA's Visible Emissions Training & Certification Program "Smoke School."

As for high winds, unlike the Bulk Material Rules, the Rules do not impose an RAL for wind speed. As communicated in CDPH's responsiveness document to public comments<sup>25</sup> to the Large Recycling Rules, based on data collected at a facility on 106<sup>th</sup> Street, requiring an RAL for wind speed would result in hundreds of RAL episodes over about a three-month period. Yet, of these wind speeds over 15 miles per hour, less than 10 episodes occurred at PM10 concentrations at or above 150 ug/m3. These elevated concentrations would already be captured by the current PM10 RAL. In addition, under 35 IAC 212.314, the Illinois Pollution Control Board provides an

<sup>&</sup>lt;sup>25</sup> https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/CDPH Response to Comments on Proposed Rules for Large Recycling Facilities - June 5, 2020.pdf#page=67

exemption to the fugitive particulate matter requirements for storage piles, conveyor loading operations, traffic areas, and operating program requirements when winds are above 25 miles per hour, averaged hourly. Therefore, facilities must still comply with all state dust control requirements until said wind speed is exceeded. Although CDPH believes the chance of an RAL exceedance during a State high-wind exemption event to be minimal, a permitted rock-crushing facility is not exempted from any of the City's RAL requirements.

# c. Opacity Limit (Rule 5.8.4)

Reliable and IAAP commented that the opacity reading requirements should be based on "a six-minute average of 24 consecutive observations recorded at 15-second intervals," and that the visual reading must be "conducted by a person trained and certified to evaluate visible emissions (Method 9)." They further stated that compliance determinations should be made consistent with State and Federal guidelines and enforcement standards, and that persons making determinations for the purpose of compliance need to be certified in the methods and requirements established in 40 CFR Part 60, Subpart OOO, Appendix A.

### **CITY RESPONSE:**

See CDPH response to the Opacity Limit (Rule 5.8.4) comment above.

d. State Operating Program for Fugitive Dust (5.8.6)

NRDC reiterated its comment above that there are differences between state and local requirements. Therefore, applicants should be required to clearly demonstrate in their fugitive dust plan how they will comply with CDPH's Rules.

# CITY RESPONSE:

As previously discussed in CDPH's response to the Monitoring plan (Rule 3.8.21.1.2)\_comment above, the Revised Proposed Rules removed references to state operating programs and require a dust control plan that meets the requirements of these rules.

### e. Air Monitoring Requirements (Rule 5.8.7)

NRDC stated that CDPH should ensure that the types of air monitors required under the Proposed Rules "provide sufficiently high quality and reliable data for assessing compliance with these Rules and other related local and/or state requirements." They stated that they support CDPH requiring federal regulatory reference monitors and that use of alternative monitoring methods "should be allowed only where such methods are for all intents and purposes functional equivalents of such reference monitors or where used to supplement data collected from reference monitors." Further, they stated that CDPH should establish air monitoring requirements for PM2.5, PM4 crystalline silica, ultrafine particles, and NO2.

By contrast, Ozinga stated that PM-10 monitors are potentially inaccurate and excessive for crushing operations, since the majority of such operations possess Lifetime or ROSS permits. Similarly, IAAP commented that "The Opacity Limit and Quarterly Opacity Measurements should

be required in place of real time or continuous air monitoring systems. If an operator cannot demonstrate compliance with either section over a period of time, then the City could require them to implement real time, continuous air monitoring as a basis for improving dust control methods, developing contingency plans, including suspension of operations during certain conditions."

### **CITY RESPONSE:**

CDPH refers NRDC and Ozinga to CDPH's response to Reliable's Objection to monitoring comments above.

f. Continuous PM10 Monitoring (Rule 5.8.7.1.1 and 5.8.7.1.2)

ELPC commented that the public should have access to the monitoring data on a real-time basis rather than waiting for CDPH to share this information.

Reliable commented that the siting and installation of PM10 monitors should be based upon U.S. EPA-approved siting methods and any air dispersion modeling conducted by the Facility, respectively. They further stated that "the proposed rule inappropriately assigns CDPH authority to require additional or differently located monitors without any requirements upon CDPH to substantiate the required change."

Reliable further commented that the requirement in Section 5.8.7.1.1 that monitors must be designated as Federal Equivalent Method (FEM) or meet the requirements of Appendix B is "inappropriately restrictive and unnecessary." Instead, they stated, this rule should "permit the use of PM10 monitors designated either as "reference methods" or "equivalent methods" (i.e., both FRM and FEM) in accordance with USEPA regulations, citing 40 CFR Parts 53 and 58, and USEPA's "List of Designated Reference and Equivalent Methods" (June 15, 2021).

#### **CITY RESPONSE:**

Relating to CEJN's comment, as stated previously, CDPH commits to posting and updating the regulated facilities' monitoring data on the open data portal as soon as staffing and resources permit.

40 CFR Part 58 contains requirements for measuring ambient air quality and for reporting ambient air quality data and related information. CDPH is not aware of any federal or state standards for fenceline monitoring of fugitive emissions from aggregate-handling and similar facilities. The Rules require PM10 monitors to be placed where there are Sensitive Areas nearby or where potential hotspots could be present. Specifically, the Rules require a monitor at fenceline locations in proximity to Sensitive Areas or have the potential to exceed NAAQS. If no Facility area meets the above criteria, the rules require one monitor to be placed downwind of prevailing winds.

In response to Reliable's comment pertaining to the requirements in Appendix B (Appendix A in the Revised Proposed Rules) being inappropriately restrictive and unnecessary, on the contrary, the rules provide relief in allowing the use of less costly sensors that meet USEPA's criteria for supplemental monitoring. See CDPH's response pertaining to Ozinga's comment that PM-10

monitors should not be required for crushing operations because they are excessive and potentially inaccurate discussed in CDPH's response to comments objecting the need for monitoring (see Objection to monitoring above). The rules do not prohibit the Applicant from using EPA reference or equivalent methods.

# g. Additional monitoring (Rule 5.8.7.1.3)

The Proposed Rules provide that CDPH may require facilities to install, operate, and maintain other monitoring methods, such as video recording. Both Reliable and IAAP commented that there is no federal or state requirement for video recording, nor any basis establishing that the recording will provide relevant data to evaluate health impacts or determine compliance with emissions requirements. They further noted that the Proposed Rule did not provide any criteria or method for the Commissioner to determine when PM10 monitoring does not "adequately assess the health impacts of such emissions."

#### **CITY RESPONSE:**

CDPH disagrees that the use of video recording will not provide relevant data to evaluate health impacts or determine compliance with emissions requirements. Video data can provide valuable insights to a Facility's operation. As an example, CDOT has provided CDPH access to certain traffic cameras to assist in quantifying emissions from truck traffic at certain intersections. In addition, cameras are being used to evaluate dust episodes at facilities around the country.

The Bulk Material Rules and the Large Recycling Rules already allow the use of video surveillance for monitoring site conditions such as the height of stockpiles. CDPH has not required any facility to conduct such surveillance; however, should CDPH find such monitoring necessary, CDPH will provide adequate guidance and justification to the Facility.

### h. Continuous Weather Monitoring (Rule 5.8.7.1.4)

Reliable commented that the siting of any meteorological tower should conform to applicable USEPA regulations and guidance, stating that "the proposed rule improperly limits the use of such USEPA regulations and guidance to solely determining the appropriate probe height."

Ozinga stated that "the installation of a weather station is an unnecessary practice. The use of local weather sites provides more than adequate data of weather conditions."

### **CITY RESPONSE:**

Per EPA guidance "the standard exposure height of wind instruments over level, open terrain is 10 m above the ground." The guidance further states "this height, which depends on the extent, height, and distance of obstructions and on-site availability, should be determined on a case-by-case basis." The Rules are consistent with the above EPA guidance.

<sup>&</sup>lt;sup>26</sup> Meteorological Monitoring Guidance for Regulatory Modeling Applications. EPA, 2000. https://www.epa.gov/sites/default/files/2020-10/documents/mmgrma\_0.pdf

In response to Ozinga's comment, the paragraph below was added in the Revised Proposed Rules.

"The Facility may use weather stations located offsite with prior written approval from the Commissioner. Such approval may be granted upon demonstration, to the satisfaction of the Commissioner, that the offsite readings are representative of Facility conditions and the Applicant can comply with the data-logging, notification, and reporting requirements in this section."

i. Data-logging (Rule 5.8.7.1.5)

Ozinga referenced its earlier objection to monitoring, noting that IEPA does not require continuous monitoring and recordkeeping for "the majority of Title V/CAAPP facilities, even in Environmental Justice Areas." They further stated that "it seems arbitrary to require excessive monitoring and recordkeeping for sites which emit low levels of pollutants."

#### **CITY RESPONSE:**

See CDPH previous responses including CDPH's response in the Need for rules\_and AIR IMPACT ANALYSIS AND MONITORING sections above.

- G. Reportable Action Level (RAL) (Rule 5.8.7.1.6)
  - a. Public health and participation

ELPC commented that this section should be modified to protect public health and the environment, noting that the rule provides that in cases where there is an upwind PM10 monitor present, the upwind PM10 concentration may be subtracted from the downwind PM10 concentration to determine a PM10 Reportable Action Level ("RAL") exceedance. They stated that, "although there might be other contributing sources, the community is still being exposed to these elevated levels of PM10. This alludes to the need to complete a cumulative impacts analysis and to set the PM10 standard to a level that is cumulatively protective of public health."

CEJN requested a new section for increased transparency and additional public participation. They proposed a new section 5.8.7.1.6.3 entitled Data Reporting: "On at least a daily basis, the owner or operator shall upload the hourly data for each monitor and weather station data for the same period in a format compatible with all or most devices to a publicly available online database operated by the Owner or Operator of the Facility. Data upload should occur frequently throughout the day, as close to real time as possible, but shall occur at least once by the end of each operating day."

### **CITY RESPONSE:**

Regarding cumulative impact, see CDPH's response to Environmental justice and Cumulative Impacts comments above.

Regarding the posting of data into the City's open data portal, see CDPH's response to Monitoring data above.

# b. NAAQS standard

Both Reliable and IAAP objected to the RAL being based on the NAAQS standard for PM10, with Reliable stating that this "is inappropriate because the NAAQS is based on a 24-hour period, not to be exceeded more than once per year. It is established by law to be protective of human health. There is no apparent technical or scientific basis to base the RAL on a NAAQS standard where neither the required air dispersion modeling nor the PM10 monitors are required to demonstrate compliance with the NAAQS."

Reliable requested CDPH to change the rule's 15-minute averaging period to a 24-hour period and change the phrase "unless a different concentration or averaging time is specified by CDPH in the permit" to "specified by NAAQS standards." Otherwise, there are likely to be "erroneous triggers from off-site, non-Facility sources that require no action by the Operator."

IAAP further noted that "the USEPA routinely reviews the averaging period (most recently on 12/18/20) and has consistently determined that no scientific or other basis exists warranting a sub-daily averaging period for PM10 (or, for that matter, fine particulate matter PM2.5)." They also stated that "there is no evidence that PM10 monitors can provide reliable measurements of particulate levels over such a short duration averaging period."

Similarly, Ozinga stated that the use of a Reportable Action Level is not necessary for crushing facilities, since the site is already performing daily visual monitoring. "In addition, RAL's can only be enforceable with the use of continuous PM-10 monitors. As stated before, the use of PM-10 monitors is excessive and not necessary for a site with little PM-10 emissions."

### **CITY RESPONSE:**

CDPH's RAL is not intended to enforce NAAQS. The RAL serves as an early warning system so that potential dust episodes can be investigated and mitigated to prevent offsite nuisance and health impacts.

Regarding IAAP's comment that EPA's 24-hour monitoring for PM10 is sufficient, and Ozinga's comment on RAL's not being necessary, refer to CDPH's previous responses pertaining to the Need for rules comments above.

### c. Additional RALs (Rule 5.8.7.1.7)

NRDC commented that CDPH should establish additional RALs for pollutants other than PM10, specifically PM2.5, PM4 crystalline silica, ultrafine particles, and NO2.

Reliable stated that, "The proposed rule contains no requirements for monitoring or modeling other potential sources of pollution from the regulated Facilities and does not establish a RAL for those other pollutants. There is no legal authority granting the Department authority to set RALs or other emission limits on a case-specific and unilateral basis outside of notice-and-comment rulemaking. Accordingly, there is no rational basis for authorizing the imposition of Department-created RALs for wind speeds, PM2.5, VOCs or "other pollutants" and this provision should be stricken."

#### **CITY RESPONSE:**

In response to NRDC's comments, the Revised Proposed Rules require the triennial sampling for lead, silica, asbestos, respirable particulates, and total dust. Depending on the concentrations of these contaminants, CDPH may incorporate them into the PM10 RALs or establish new RALs to protect public health. See also CDPH's response to Environmental justice and Cumulative Impacts comments above.

In response to Reliable's comments, the Commissioner is granted broad duties and powers under the Environmental Protection and Control Ordinance (Chapter 11-4 of the MCC) to protect human health and safety and the environment. In addition, under 11-4-040 of the MCC, the commissioner may impose reasonable permit conditions to protect the public health, safety, or welfare of the city.

# d. Alternate RAL (Rule 5.8.7.1.8)

CEJN requested that an applicant not be allowed to propose an alternate PM10 RAL concentration or averaging time until they have conducted "sufficient public outreach and research, which demonstrates that "the proposed PM10 RAL will not substantially or unreasonably interfere with surrounding residents' quality of life." They further recommended that CPDH add a new section entitled "Alternate RAL Public Notification," which would provide that:

"The owner operator must hold at least one public meeting, prior to submitting a proposal to CDPH, to explain the need for an alternate RAL, present findings included within the proposal, and provide an opportunity for public comments and questions to be recorded and submitted within the proposal. Once submitted this proposal and CDPH's response to the proposal must be made publicly available."

Reliable commented that the rule should clarify that the "Applicant" may, at any time, request an alternative PM10 RAL. They also stated that Section 5.8.7.1.8.b "lacks sufficient clarity and specificity with respect to the standard by which an Applicant may "Demonstrate" that an alternative PM10 RAL is protective of human health and the environment. Specific criteria should be identified (e.g., how many months of monitoring data must be submitted)."

### **CITY RESPONSE:**

While not requiring the Owner or Operator to hold a public meeting, CDPH will post on its website for public comment all requests pertaining to New or Expanding Facilities, and requests for non-standard hours of operation or substantial changes to the permit such as proposed use of alternate RALs. Such postings will follow the CDPH Permit Process Guidelines For Consequential Facilities<sup>27</sup>.

<sup>&</sup>lt;sup>27</sup> https://www.chicago.gov/city/en/depts/cdph/provdrs/healthy\_communities/svcs/public-health---community-information.html

As circumstances can vary based on site-specific conditions, CDPH provides broad criteria in the rules, but believes detailed criteria as sought by Reliable would not be practical. CDPH suggests any Applicant interested in proposing an alternate RAL submit a workplan to CDPH for review prior to conducting the work. Such workplan may be posted in CDPH's website for public comment.

# e. Contingency Plan (Rule 5.8.7.1.12)

IAAP commented that "Response actions (i.e., mitigative actions) – and the obligation for Facilities to determine through their "Contingency Plan" whether mitigative actions are required – should be based on a longer averaging time (i.e., 24-hours or longer) in order to lessen the likelihood of RAL triggers from offsite (non-Facility) sources that cannot be mitigated by the Facility." They further stated that "A brief, episodic, detection in excess of 150 ug/m3 may occur, for example, due to passing vehicles or other offsite sources. Requiring that Facilities evaluate whether mitigative actions are required for each and every potential RAL occurring every 15 minutes from any PM10 monitor is infeasible, unduly burdensome, and will not provide a Facility with sufficient time to properly respond to or mitigate actual onsite sources of elevated particulate emissions."

Ozinga commented that requiring a Contingency Plan is unnecessary since a Dust Monitoring Plan provides adequate guidance in dust mitigation.

#### **CITY RESPONSE:**

The use of a 24-hour averaging time would not allow the detection and timely mitigation of localized hotspots of short duration that may occur over the course of the day. CDPH's selection of the 150 ug/m3, fifteen-minute RAL took into consideration the frequent occurrence of false alarms. As shown in the chart below, the exceedance of the RAL is not a frequent event, occurring less than one percent of the time for this particular operation.

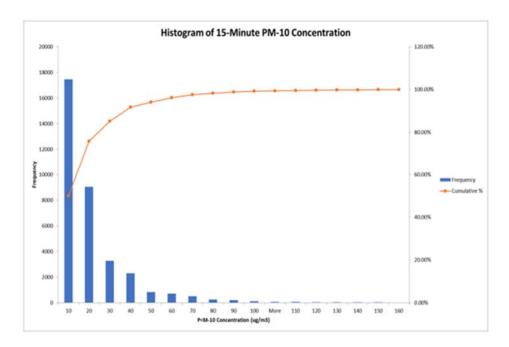


Figure 2 -Frequency of PM 10 RALs by Concentration at a Class V Recycling Facility (April 2019 - June 2019)<sup>28</sup>

In response to Ozinga's comment, CDPH considers the contingency plan an essential complement to a dust monitoring plan. It is not enough to detect a dust episode, but to mitigate and document the mitigative action to allow discovery of trends that improve responses over time and to show good-faith effort of the Operator to minimize dust.

## H. Monitoring Exemption (Rule 5.8.7.1.14)

ELPC commented that "the exemptions for air quality monitoring are detrimental to public health and the environment." In particular, they stated that the last exemption criteria, requiring that the Facility has not been found in violation of any air-quality laws relating to fugitive dust emissions in the previous 3 years, is "alarming." They stated that: "we have seen several instances of the surrounding community filing evidence-supported complaints about air quality, but when the inspector is able to arrive, the circumstances surrounding the facility have changed. There are other instances where a facility has been placed under an administrative consent order, but due to the finding of no liability under the order, the facility was not in violation of air quality laws. This exemption should therefore not include facilities that have received a number of complaints within at least the last three years of operating. To allow such a loophole would undermine the Proposed Rules."

<sup>&</sup>lt;sup>28</sup> Taken from CDPH Response to Comments on Proposed Rules for Large Recycling Facilities - June 5, 2020, at https://www.chicago.gov/content/dam/city/depts/cdph/InspectionsandPermitting/CDPH%20Response%20to%20 Comments%20on%20Proposed%20Rules%20for%20Large%20Recycling%20Facilities%20-%20June%205,%202020.pdf

Reliable commented that CDPH should change this provision so that an applicant need only meet "one or more" of the listed exemption criteria, rather than all of them. They stated that "Facilities that have no unpaved parking lots or internal roadways within 660 of a Sensitive Area may not have all operations inside a building and will still not interrupt the quiet enjoyment of the community in the surrounding areas. In addition, for the last criteria, regarding any violations in the previous (3) three years, add 'beginning with the effective date of this Ordinance.' Previous ordinance language may have been unclear in form and substance. Existing Facilities who have implemented mitigation measures through consultation with the City should not be penalized for engaging in productive discussions."

#### CITY RESPONSE:

While CDPH considers complaints as part of its enforcement and permitting considerations, for purposes of this exemption, CDPH focuses on the history of violations among other factors. However, CDPH broadened the language in the Revised Proposed Rules regarding violations as follows:

"The Facility has not been found in violation of any air-quality laws, permit conditions, regulations, court orders, consent decrees, or settlements relating to Fugitive Dust emissions in the previous (3) three years."

In response to Reliable's comments, only meeting one of the requirements is insufficient to ensure fugitive emissions will not impact offsite properties. Also, the three-year compliance history review is consistent with similar CDPH requirements which look at the three-year period immediately preceding the date of the application.

# I. Equipment Maintenance (Rule 5.8.9)

CEJN requested that CDPH add a requirement that: "All maintenance, routine or otherwise, shall be logged and submitted to CDPH with quarterly reporting as referenced in 5.8.16 of these rules."

### **CITY RESPONSE:**

The Proposed Rules do not require such documentation to be provided to CDPH, but will require Facilities to provide such records to CDPH inspectors upon request.

# J. Material Handling, Paved Surface (Rule 5.8.11)

CEJN requested that CDPH add a requirement that: "Frequent and diligent sweeping and maintenance shall be conducted on any surface where material handling activities are conducted. Sweeping of such areas shall occur at least once every 4 hours or once within the same shift when material handling takes place."

### **CITY RESPONSE:**

The street sweeping schedule in this section pertains to areas that can be cleaned with a mechanical street sweeper. CDPH clarified the introductory paragraph of this section in the Revised Proposed Rules to read as follows:

"All driveways, access roads, parking areas, and other paved areas used for vehicle traffic, including onsite traffic by material-moving equipment, shall be properly maintained to prevent or minimize any dust emissions, standing water, and the tracking of mud offsite."

# K. Fire Prevention and Accident Safety Plan (Rule 5.8.12)

IAAP stated that "this requirement is onerous and unnecessary and should be removed, noting that it "is redundant with the Site Design Report requirements." They further stated that:

"To comply, a facility will have to develop a plan compliant with NFPA standards, which will have to be outsourced to ensure it meets the appropriate requirements. Each facility has an emergency action plan and would contact the local Fire Department for any issues related to an open fire or fire prevention. Many, if not all, of these facilities must provide a Tier II report to the appropriate local emergency planning committee (LEPC) or the fire department. The Tier II report identifies what materials are stored on-site to provide information to an emergency response agency in the event of a fire or serious incident. Facilities should not have to develop a separate plan outside of the Tier II reports as it is redundant."

#### CITY RESPONSE:

See CDPH's response pertaining to the FIRE PREVENTION (Rule 3.9.5) comments above. In addition, if the facility already has a fire prevention plan pursuant to Tier II reporting under EPA's Emergency Planning and Community Right-to-Know Act (EPCRA) or as required under 11-4-1200 of the MCC, such plan should meet the fire prevention plan requirements under these rules.

### L. Pavement Maintenance and Cleaning (Rule 5.8.13)

Reliable requested that CDPH add, at the beginning of this rule, the phrase: "In accordance with 35 III. Admin. Code § 212 and the Municipal Code."

CEJN requested CDPH add language that pavement maintenance must be conducted "using current accepted vehicle tracking best practices in conjunction with street sweeping, and frequent inspection of surrounding streets, curbs, and gutters systems."

CEJN also requested CDPH to add a new section 5.8.13.1 Stabilized Exit and Entrance:

"Stabilized construction exits and entrances shall be constructed and maintained at all areas where a vehicle tracking on or off site is possible. Specifically, stabilized construction exits, and entrances must be constructed at any ingress or egress where a vehicle enters a public or private roadway from the Facility. Each stabilized exit or entrance must be site specific and may be rock pads, shaker racks, and/or wheel washers dependent on the needs and characteristics of the Facility. Each stabilized exit or entrance shall be designed so that the drainage and removed sediment leads to a trap, silt fence, and/or other settling device. No

onsite vehicle shall pass onto a public right of-way without first passing over a stabilized construction exit."

#### **CITY RESPONSE:**

In response to Reliable's comment, 35 IAC Part 212 and the MCC do not contain the necessary level of detail to be sufficiently useful for this specific section.

Pertaining to CEJN's comment, see 16 comment above.

M. Sweeping Frequency (Rule 5.8.13.1.3)

Reliable requested CDPH to add an exception to the sweeping requirement when "all pavements that require sweeping under this section are free and clear of any material transported to or from the Facilities or emitted by Facility operation," noting that the Operator should be required to make note when pavements are not swept the minimum of once daily for that reason.

#### **CITY RESPONSE:**

In response to Reliable's comment, the Revised Proposed Rules have been amended as follows:

"If the Operator did not sweep because all pavements were free of any material, or could not sweep because of an emergency or inclement weather (e.g., pavements are inaccessible due to snow cover), the Operator shall note such reasons in the sweeping log required by subsection 5.8.13.1.4."

N. Conveyors (Proposed new section 5.8.18)

CEJN requested that the rules include a new section, which would require all conveyors used onsite to be properly designed, operated, and maintained to prevent or minimize dust emissions and debris. They provided suggested language for this rule, including detailed requirements for conveyor enclosures, conveyor water suppression, conveyors design and equipment, and conveyor maintenance.

#### **CITY RESPONSE:**

CDPH is not requiring explicit requirements for conveyors but references federal and state technical guidance and BMPs, including the design and maintenance of conveyor systems, for dust control and suppression. See CDPH response to Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7) comments above.

O. Local Exhaust Ventilation Systems (Proposed new section 5.8.19)

CEJN requested that the rules include a new section, which would require all facilities to install a local exhaust ventilation system using negative pressure exhaust ventilation technique to capture dust. They provided suggested language for this rule, including detailed requirements for the ventilation systems, enclosures, and maintenance and repair.

#### **CITY RESPONSE:**

See CDPH response to Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7) comments above.

## P. Transfer Points (Proposed new section 5.8.20)

CEJN requested that the rules include a new section, which would require all facilities to enclose all transfer points, including feed and discharge points, including installing properly designed chutes with rubber seals between stationary and moving components. They provided suggested language for this rule with detailed requirements for transfer point systems.

### CITY RESPONSE:

See CDPH response to Proposed New Enclosure Requirement (Proposed Rule 3.8.4.1.7) comments above.

# Q. RECORDKEEPING / REPORTING

# a. Disposal Facilities (Rule 3.9.10)

Openlands stated that "It is very important to understand the end user in the materials to be repurposed," including "who those entities are, where they are located, how often they remove the materials from the storage sites, and their current mode of transporting those materials." They further stated it "would be helpful to the end user to have us understand what products are created from the repurposed materials and if those are used locally or outside the City/region." Further, "If the entities would be able to remove the materials in a safe way and more often, there would be less issue with storage on site."

### **CITY RESPONSE:**

CDPH does not require the reporting of where all reprocessed materials are used. However, the Rules require an annual Affidavit of Reprocessing from the Operator stating the amount of Reprocessed material sold or reused in the previous year and includes the name and address of the entities that purchased materials from the Facility. CDPH requires routine material testing to ensure that such reprocessed materials are appropriate for use offsite. In addition, subsection 5.8.16.1.6 of the Proposed Rules requires the Facility to provide a list of the disposal facilities used to dispose of the Unauthorized Materials and Waste, and the types and quantities of materials taken to each disposal facility.

# b. Monthly Data Reporting (Rule 5.8.7.1.9)

CEJN requested that this rule include an additional requirement that "Upon receipt of such monthly data reporting, CDPH shall upload the data to a publicly accessible website within 14 days of the end of the month in which the data was collected."

In contrast, Ozinga objected to the monthly reporting requirement, stating that "the use of PM-10 monitors is excessive and not necessary for a site with little PM-10 emissions. However, any

alternative means to assure compliance can be listed in the Quarterly Reports listed in Section 5.8.16."

#### **CITY RESPONSE:**

Regarding making the data available to the public, refer to CDPH's response to Monitoring data comment above.

Regarding the comment on PM10 monitoring being burdensome and unnecessary, see CDPH's response to Objection to monitoring comments above.

c. RAL Notification (Rule 5.8.7.1.10)

The Proposed Rules require operators to notify CDPH within fifteen minutes, or within the timeframe specified in the permit, when a reportable action level is exceeded.

d. Fifteen-minute timeframe

Reliable commented that: "It is unduly burdensome and unreasonable to require a RAL notification to the Department within 15 minutes of each and every exceedance of a RAL. The proposed rule should allow notification within 24-hours, consistent with the RAL Recording requirement under Section 5.8.7.1.11." Similarly, Ozinga stated that the response time of 15 minutes is not enough time to identify the source of a RAL exceedance and, further, that "if the source of the dust has ceased and is no longer an issue, reporting to the City of Chicago is unnecessary." Ozinga also reiterated its comment that "the use of a Reportable Action Level is not necessary for crushing facilities."

# **CITY RESPONSE:**

Regarding the 15-minute averaging time, see CDPH's response to the e. Contingency Plan (Rule 5.8.7.1.12) comments above. Also, the rule does not require the Facility to identify the source within fifteen minutes, just the following information:

- The date and time of the RAL exceedance;
- The average wind speed and wind direction recorded over a 15-minute period;
- The concentrations of PM10 recorded by all monitors over the same 15minute period; and
- The latitude and longitude coordinates in decimal degrees of all monitoring locations.

CDPH recommends utilization of telemetry and wireless internet connectivity to automatically collect and report such information. This technology is readily available and is already in use at several CDPH-permitted facilities.

### e. Public Notice

CEJN requested that CDPH add a new section 5.8.7.1.14 in the rules entitled "RAL Public Notification." They recommended that it provide that "When a reportable action level is exceeded, the Operator shall place an alert on the publicly available website containing air monitoring and weather station data, referenced in 5.8.7.1.6 above, within 30 minutes of the recorded exceedance. The alert should be titled "RAL Alert Condition" in bolded type followed by" certain specified information about the exceedance.

#### **CITY RESPONSE:**

The purpose of the RAL, which is a very conservative value, is to provide a tool for the Facility to ensure that dust does not become an issue. In itself, the RAL is not a violation of any air quality standards, put provides an opportunity for the Operator to mitigate such emissions before they become a violation. To provide more timely data, Subsection 7.17 of the Revised Proposed Rules will require near real-time (no less than once every fifteen (15) minutes) weather and PM10 data to be transmitted to CDPH. This requirement will take effect starting the 18<sup>th</sup> month following the effective date of the rules. As stated earlier in this responsiveness document, CDPH is committed to making the monitoring data publicly available as capacity and resources become available.

# f. RAL Recording (Rule 5.8.7.1.11)

The Proposed Rules require the Operator to record certain information about RAL exceedances in the Facility's Operating Record, including a "description of the mitigative action(s) taken." Reliable noted that Rule 5.8.7.1.12 requires a Contingency Plan, which must describe mitigative actions that will be taken in response to exceedance of an RAL. They stated that "mitigation actions could, foreseeably, take days or weeks to implement depending on the source and/or cause." Therefore, they requested that this rule "be revised to clarify that mitigative action is not required within 24-hours of a RAL exceedance."

#### CITY RESPONSE:

CDPH clarified the language in the Revised Proposed Rules as follows:

"A description of the mitigative action(s) taken or planned, as needed, or any further investigation required. If further investigation or mitigation is planned, this entry shall be updated on a weekly basis until the investigation has been completed and any mitigative action has been implemented."

# g. Sweeping *Log* (Rule 5.8.13.1.4)

The Proposed Rules require Operators to record the date and time when street sweeping is performed, as well as the total vehicle count each operating day.

CEJN commented that this rule should go further and require inspection as well, suggesting a new section 5.8.13.1.7, which would require that "All site pavements, adjacent pavements accessible by the Owner or Operator, gutter systems, curbs, and public rights-of-way within a

quarter mile of the Facility, at a minimum, should be inspected twice daily for dust, mud, or spilled or emitted materials from the Facility's operation. If excessive dust, mud, or spilled or emitted materials from the Facility's operation are found, action must be taken to clean the affected area." They also recommended a new section 5.8.13.1.8 entitled "Inspection Log," which would require that: "The date and time when inspection detailed in section 5.8.13.1.6 was performed, any offsite tracking detected, and the total vehicle count shall be recorded each operating day."

### **CITY RESPONSE:**

The rules contain strict requirements pertaining to street sweeping and cleanup of onsite and offsite areas. CDPH may, as needed, strengthen the already stringent requirements above by adding additional cleaning requirements in the permit special conditions.

# *h.* Quarterly Reporting (Rule 5.8.16)

The Proposed Rules require Facilities to submit quarterly reports containing certain specified information. ELPC commented that "the public should have access to the quarterly reports, rather than wasting resources to access it via a public records request. Delayed access to information about the air the public breathes is not wholly protective of public health."

CEJN requested that the quarterly summary include the following additional information: "All maintenance conducted on any vehicles, surfaces, or equipment used on site," as well as all 'nuisance' complaints received by the Owner or Operator, and their outcomes. They further requested that the rules require the report to be posted on the Owner or Operator's publicly accessible website within 45 days following the end of each quarter.

### **CITY RESPONSE:**

As previously mentioned in CDPH's response to Monitoring data comments above, CDPH's goal is to post and update regulated facilities' monitoring data on the open data portal in the future. As part of this process, CDPH will explore how other reported data may be made available to the public.

# IV. Conclusion

CDPH values public input on regulatory actions, including proposed rules such as these, and we appreciate the robust engagement of all stakeholders in this matter. As stated at the outset, CDPH carefully considered all comments and, as a result, made a number of changes to the Proposed Rules. CDPH is providing an additional opportunity for public comment on the Revised Proposed Rules. Interested parties may submit a comment through CDPH's new Public Comment Form, available at <a href="https://www.chicago.gov/cdphcommunityinfo">www.chicago.gov/cdphcommunityinfo</a>, through January 20, 2023.

Following CDPH's review of any additional comments, we will finalize and post the final rules on the Department's website at <a href="https://www.chicago.gov/environmentalrules">www.chicago.gov/environmentalrules</a>.